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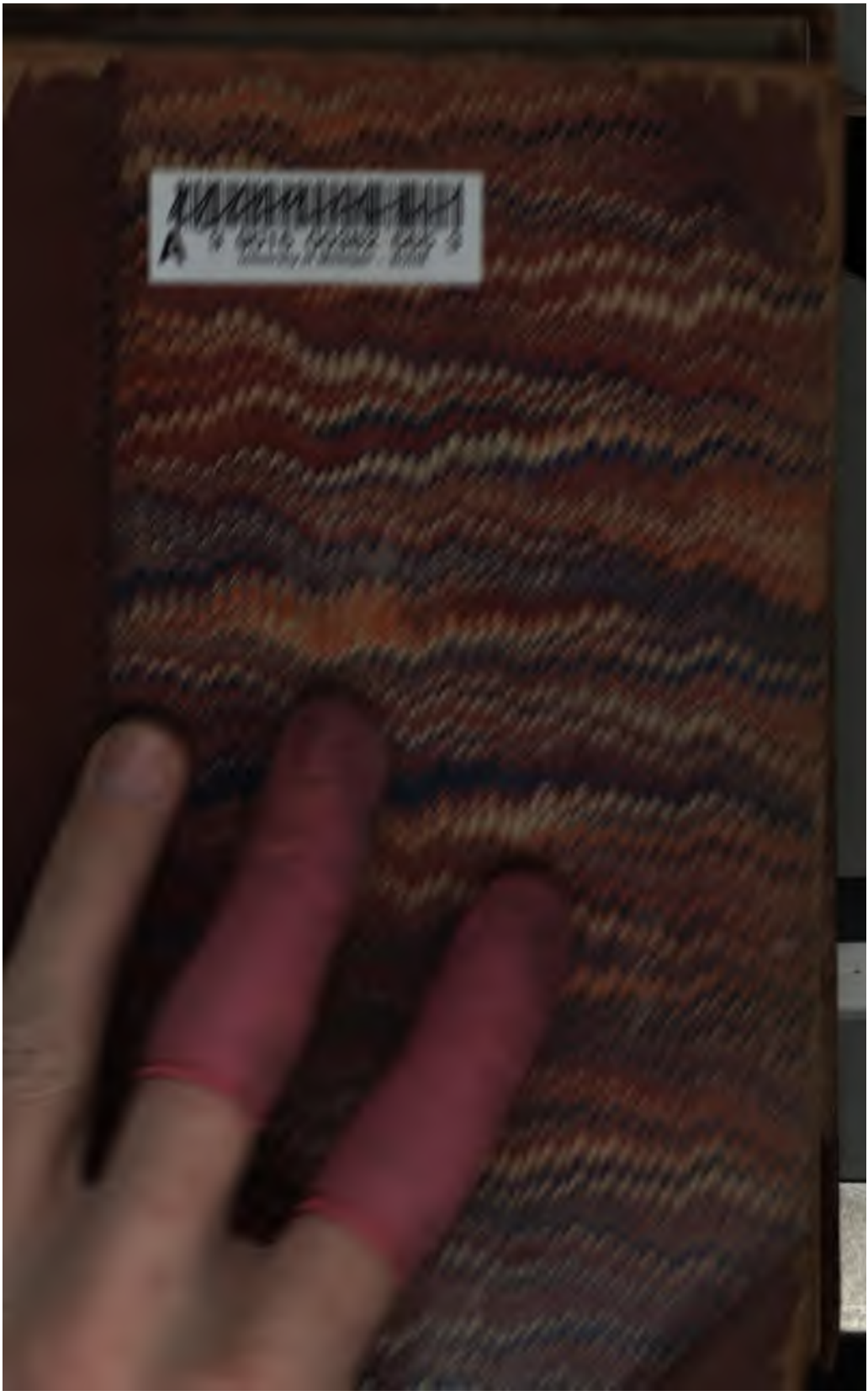

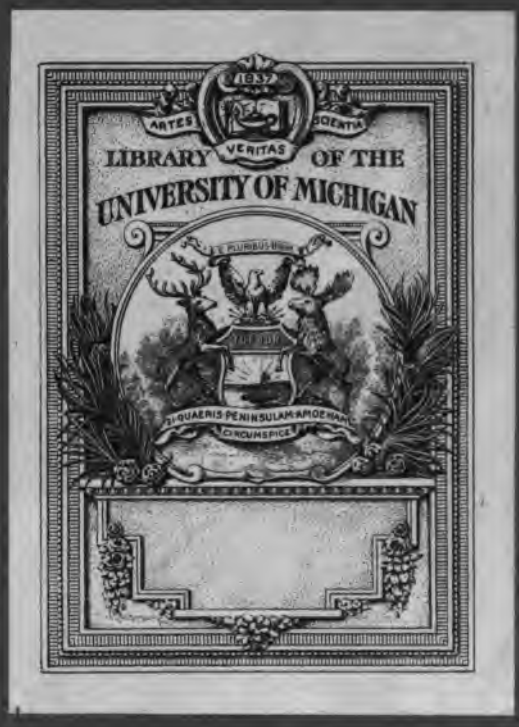
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VOL. XV.

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LONDON:

GROOMBRIDGE & SONS, 5 PATERNOSTER ROW;
EDINBURGH: W. H. BILLING, 19 CASTLE STREET;
NEW YORK: W. RADDE, 322 BROADWAY.

MDCCCLVII.

PRINTED BY W. DAVY AND SON, GILBERT STREET, OXFORD STREET.

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THE

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HOW FAR IS BELLADONNA A PROPHYLACTIC OF SCARLATINA?

By George Wyld, M.D.

(Read before the British Homœopathic Society.)

In the year 1799 Hahnemann first conceived the idea, and subsequently confirmed that idea in his own mind by experiments, that Belladonna was a wonderfully powerful, if not a certain prophylactic in scarlatina of the *smooth* ordinary type, and it is the object of this paper to arrive at some conclusion as to how far Hahnemann's idea has been confirmed by subsequent experience.

To call the opinions of Hahnemann in question in this matter may, to many, at first sight, appear somewhat presumptuous; because there are few facts connected with our system of medicine which have generally been considered as better established. Still in this, as in all other questions connected with our system, it is our duty as men of science boldly to enquire, and steadfastly to abide by that only which the most rigid cross-questioning fails to convict of error. But should it even be arrived at that Belladonna is in *our day* with reference to scarlatina unworthy of the high position it held in the earlier days of Hahne-

mann, this result does not necessarily bring any discredit upon the author of the original idea, but may merely show that there is a subtlety in the character of many diseases, and an instability of type, which in time reduces the efficiency or homœopathicity of certain drugs with reference to certain specific diseases; so that what in medicine is true to-day may be, and often is, false to-morrow. Truly, as says Hippocrates, "Our life is short, but our art is long and difficult;" so long, and so difficult, and so shifting, we may add, as would appear for ever to place medicine beyond the limits of a certain science.

But let us see what evidence is to be obtained in the question before us. With reference to the facts of the case there is in this paper no pretention to any novelty, these facts being entirely second-hand, being indeed all obtained from a paper by Dr. Begbie, in the *Medico-Chirurgical Review* (1855), on the subject before us, and from the pages of Professor Henderson's reply to Dr. Simpson's laborious burlesque on Homœopathy; and there is this great advantage, that the facts are agreed to by both parties, the conclusions drawn from these facts only being different. But where undoubted facts are attainable, surely a philosophic deduction from such facts ought not to be beyond the reach of the careful seeker after truth. I shall now proceed to cite certain cases which would appear to justify the conclusions arrived at by Hahnemann.

In 1812 Schenck at Hitchenbach during an epidemic of scarlatina, gave Belladonna to 525 individuals, out of which number only three were attacked by the disease.

Dr. Gumpert at Posen in 1818 during an epidemic, gave Belladonna to twenty families, and three individuals only were attacked by scarlatina.

M. Berndt in 1817-18-19, during epidemics in Austria, gave Belladonna to 195 children, and fourteen only took scarlatina, and that in a mild form.

Dusterberg at Warburg in 1820, during an epidemic, administered Belladonna to a certain number of families, but in each family *excepted one child*, and *all* were protected who took Belladonna, and *all* who had no Belladonna took scarlatina. Of this statement we would beg in passing to observe, that if it

is completely to be depended upon, it would appear to establish in the fullest manner the truth of Hahnemann's idea with reference to the power of Belladonna in the epidemic at Warburg in 1820.

Behr at Bernburg, during an epidemic in 1820, gave Belladonna to *forty-seven* individuals, and only *six* were attacked by scarlatina, and nearly all were attacked mildly.

Meglin at Colmar found that *all* were protected by Belladonna in an epidemic in 1820.

Dr. Beeke mentions that in two villages in Silesia, during an epidemic, 132 took Belladonna, and only six were attacked by scarlatina.

Kunzmann, physician to the Frederick Institution, Berlin, became in 1825 convinced of the prophylactic power of Belladonna, having apparently protected *sixty* children in an epidemic of scarlatina, which, until the drug was given, appeared to be spreading in the hospital.

Gelnecki, of Stettin, found that of *ninety-four* children *three* only out of *seventy-six* who took Belladonna were attacked by scarlatina, while fifteen who did not take the drug were *all* attacked. And here I would again observe, that we have a very strong corroboration of Hahnemann's idea.

Maizier, of Burg, gave Belladonna to 170 children, in a village, and none were attacked by scarlatina, while in a neighbouring village where no Belladonna was given, many were attacked and several children died.

On scarlatina appearing in the Hospital at Langendorf, Dr. Randhan gave Belladonna to 160 children, who all remained free from the disease.

Valsen, at Cleves, gave Belladonna to 247 individuals, and only *thirteen* were attacked by scarlatina.

Dr. Black gave Belladonna to eleven children living in a house where there were *two* cases of scarlatina, one of them accompanied with sloughing sore throat, and *all* escaped, although one slept in the same bed with one of the patients.

Dr. Newbigging, in 1849, at John Watson's Hospital in Edinburgh, gave Belladonna to *sixty-nine* children, and *three* only afterwards were attacked, although the disease previously

was prevailing, that is, *twenty-two* cases had occurred. Dr. Newbigging adds, that he should consider it to be his duty at all times to avail himself of Belladonna under similar circumstances.

Such is the evidence in favor of the idea of the prophylactic power of Belladonna in scarlatina, but before drawing any conclusions, let us see what Dr. Begbie has brought forward on the opposite side of the question.

Dr. Lehmann, staff physician at Torgau, says that in a family of *three* boys, on the eldest being attacked with scarlatina, he put the remaining two under Belladonna, but both were attacked, and one died four months after the first outbreak. In a family of *five*, a boy was attacked with scarlatina, and the other four were put under Belladonna; in eight days a girl was attacked, and on the third day died; next day a sister was attacked and recovered; and then another sister was attacked, and on the fourth day died: thus two out of the family of five died. A boy aged five years, an only son, took scarlatina after having taken Belladonna for several weeks, and on the fourth day he died. In a family of four children the eldest took scarlatina; the three others were then put under Belladonna, and two became affected with scarlatina in a severer form than the first who took no Belladonna.

Dr. Mierendorf, of Stralsund, says that children to whom Belladonna was given died in greater proportion than those who took none.

Mr. B. Bell on scarlatina appearing in Watson's Hospital, Edinburgh, in 1851, gave Belladonna to *fifty-four* boys, and *twenty-three* were attacked.

Dr. Gillespie, of Donaldson's Hospital, gave Belladonna to 100 boys, and *fifty-two* took scarlatina.

Dr. Elb, of Dresden, a homœopathist, did not find Belladonna of any marked benefit in a *certain* epidemic of malignant scarlatina.

Dr. Balfour, on scarlatina showing itself in the Royal Military Asylum, Chelsea, gave Belladonna to seventy-six boys, and to the remaining seventy-five he gave no Belladonna, and two in each division were attacked.

Dr. A. Wood, of Herriott's Hospital, Edinburgh, gave the *eighth* part of a grain of Belladonna twice a-day to one half of the boys, and found that as many were attacked with scarlatina who took Belladonna as of those who took none.

Having thus given the testimony on both sides, we have now to observe that the great body of the evidence on the positive side is derived from German practitioners, and that it was obtained chiefly between the years 1812 and 1825, and that *numerically* speaking this evidence is most complete. That the evidence was strong we have almost the highest authority for believing, for we find, as quoted by Dr. Begbie, that the celebrated Hufeland writes in 1825, "It is to me a great pleasure to be able to confirm by new observations the prophylactic powers of Belladonna in scarlet-fever; each year (since the subject was first broached) has brought with it a large number of corroborative facts. In my own practice I have on several occasions used the remedy, and I have never seen one of those who used it in the proper manner affected by the disease."

This testimony ought certainly to have very great weight with us, and indeed it would appear to go so far as to show that Hahnemann's idea regarding Belladonna was pretty generally adopted in Germany at that period. It is further confessed that Dr. Begbie is anxious to disprove Hahnemann's idea, and it is not therefore likely that he has omitted any evidence on the negative side which was procurable; and I think it will be admitted that this evidence, although startling and discouraging to the votaries of Belladonna, is yet substantially, as well as numerically, far from being a triumphant set-off against the singularly weighty evidence in favor of Hahnemann's idea.

Thus in the thirteen cases given by Dr. Lehmann, *four* died, showing that the scarlatina he alluded to was of the malignant type, of which form of scarlatina I fear Belladonna is not powerful, either as a preventive or curative agent. This observation is also applicable to the scepticism of Dr. Elb, for as he informs us, most of those who died of the epidemic he refers to, died on the third day. Dr. Mierendorf indeed says that children to whom Belladonna was given, died in greater proportion than those to whom it was not given. This certainly looks very ominous,

but Dr. Begbie adds in the same paragraph that of *one hundred* children (particulars not given) so treated, *fifteen* became affected, and *one* died, a statement which would appear to be a fair set off against Dr. Mierendorf's cases, concerning which we are not furnished with any data whatever. So far then it does appear to me that the *case* has been made out in a very strong manner in favor of the prophylactic powers of Belladonna in scarlatina of the ordinary type occurring in Germany between the years of 1812 and 1825; but when we come to the Edinburgh experiments, I confess that the tables would appear to be somewhat turned against us.

Dr. Newbigging indeed offers us strong testimony in its favor from his experience in 1849 at Watson's *Hospital,* and this renders the opposing testimony of Mr. Bell and Drs. Gillespie and Wood all the more surprising: for it certainly does appear that with them Belladonna can scarcely be shown to have rendered any service. Professor Henderson indeed endeavours to show that Mr. Bell's cases, which were treated with Belladonna, were to the extent of *twelve per cent.* more protected than those of Dr. Gillespie's without any Belladonna. But for my own part I am free to confess that even could this be absolutely proved, it would be but a poor triumph for our much vaunted Belladonna to boast of.

It has been attempted to throw a doubt on the drug employed; but we have no evidence that it was not true Belladonna, while we have the evidence of dilated pupils, &c., that it was the drug intended. I fully believe that better results would have been obtained if smaller doses of Belladonna had been given; for it is confessed that the quantity was sufficient to injure the health of those taking it. Still we cannot build too much on this source of failure, because Dr. Newbigging, who gave equally large doses, had yet results which quite satisfied his own mind. It remains only that the Belladonna he used might not have been so strong as that employed by the other experimenters.

The entire question thus appears to me to be rendered by these Edinburgh experimenters if not doubtful, at least enigmatical, and the only conclusions I can arrive at are the following:

First. That as Boyle gives a catalogue of 2027 cases which

took Belladonna, and only 78 of these were attacked with scarlatina, the evidence, *numerically* speaking, immensely preponderates in favor of Hahnemann's idea.

Second. That according to the experience of Drs. Lehmann and Elb, (which experience, I believe, is corroborated by many other homœopathists,) Belladonna would appear to have little power either as a preventive or a curative, in the malignant forms of scarlatina.

Third. That the Edinburgh experiments complicate the entire question, and tend to throw doubts upon the truth of Hahnemann's opinion, if not with reference to scarlatina generally, at least with reference to *certain* epidemics of even the ordinary form of scarlatina; there being no reason to suppose that the cases alluded to in these experiments differed from the scarlatina *now usually* met with.

Fourth. That notwithstanding the above concessions, it would be recklessly premature, considering the immense *numerical* evidence in favor of the use of Belladonna, to abandon the use of that drug with reference to its prophylactic powers in scarlatina.

Fifth. That as the exanthematæ are apparently being continually modified, and as scarlatina presents many modifications in its type, it is important that those believing in the homœopathic law should be for ever on the outlook for other prophylactic remedies besides Belladonna, and of these it seems to me that *aconite*, *pulsatilla*, and *rhus toxicodendron* present in their pathogenesy many *similia* to the different forms of scarlatina which now frequently appear amongst us.

In speaking on this subject with my brother homœopathists, I have found more scepticism than faith with regard to the powers of Belladonna in scarlet fever; and while at the late meeting of the British Homœopathic Society Dr. Hamilton and Mr. Edwards gave instances in their own experience where entire schools had been apparently protected from the spread of scarlet fever by this drug, Mr. Morgan, on the other hand, gave an instance where on the occurrence of a case of scarlet fever in a school at St. John's Wood, the patient was removed and died, and yet without any Belladonna being given no other case

occurred; showing that the illustrations offered by Dr Hamilton and Mr. Edwards afforded no *positive* proof in favor of Belladonna.

These facts exhibit in a striking manner how extremely difficult it is to arrive at unimpeachable medical statistics.

Belladonna unless fresh, has often been found to be almost inert, and many recent failures may be attributed to this cause; still who can say that *all* the Belladonna which went to prove Hahnemann's case, was good, while *all* that which has proved the contrary, was bad?

To say the least of it, it appears to me that the entire question regarding the powers of Belladonna is reopened. But while our faith in this drug with reference to scarlet fever may become less, this result does not touch on the *law* by which we are guided in the cure of disease, but only serves to show that if in the years between 1812 and 1825 Belladonna was a prophylactic in scarlet fever, but is not so now, the discrepancy must be explained by the *fact* of the scarlet fever of our day not being homœopathic to that kind or preparation of Belladonna now generally prescribed.

MINERAL WATERS: TEPLITZ, LIPPSPRINGE, KREUZNACH.

We have on more than one occasion contrasted the utter neglect of our mineral waters by the homœopathic practitioners of this country, with the consideration awarded to their Brunnen by our German colleagues. The circumstance that every German who can do so invariably spends a portion of each year at some Badeanstalt, just as every Englishman goes to the seaside, or to the Continent, or to some lacustrine and mountainous part of the British dominions, makes it indispensable for the German homœopath to inform himself, a
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character so familiar to the reader of the ordinary works on Mineral waters. Who does not know the style of book issued by the presiding medical divinities of the German Brunnen? A thin octavo in a limp paper cover; the leaves so loosely attached that the whole volume falls to pieces in your hands when you cut up the pages. A portrait of the author in the worst Teutonic style of lithography as a frontispiece. A description of the Badeort, its distance in German miles from the different Capitals, with the charge for posting; a list of the hotels; an enumeration of the places of amusement and remarkable objects in the neighbourhood; a minute chemical analysis of the water; a list of the affections it is useful for, which exhausts Cullen's Nosography; a selection of cases cured by the waters, administered under the judicious guidance of Dr. Pumpenheim; with some warning remarks relative to the danger of using the waters without medical advice, and *zwar* the advice of the said Dr. Pumpenheim; the whole concluding with a facsimile (it is to be presumed) of the doctor's visiting card, purporting that he lives two stories high at No. 73 Herrngasse, opposite the *Mode-Handlung zum blauen Kopfputz,* and next door but one to the *Gasthaus zum römischen Kaiser,* and that he is to be seen professionally every morning from 7 to 9 o'clock. This postscript is certainly the most truthful part of the publication, and by far the most important—to the worthy doctor.

However, the sort of information contained in these works is evidently not of a kind to satisfy a homœopathic physician, nor such as could enable him to employ the waters according to his therapeutic method. The homœopathist requires to possess some knowledge of the pathogenetic effects of every medicinal agent he employs; otherwise his practice becomes purely empirical. Accordingly many of the mineral waters of Germany have been subjected to a more or less complete investigation by the resident homœopathists, with a view to ascertain their indi- in disease. We have thus symptomatologies of the Wiesbaden, Schwalbach, Reinerz, Heilbrunn, Carlsbad, Pyrmont, and of the two first-named mi- of this article, Teplitz and Lippspringe.

Although none of these can lay claim to be considered exhaustive pathogeneses of the respective waters, they are better than the vague *ab usu in morbis* indications and misguidings of the ordinary "Guides" to be had at the various Bads.

With the labors of two homœopathists, respectively pursuing their vocation at Teplitz and Lippspringe, before us, we propose giving a brief account of the effects, pathogenetic and therapeutic, of these two mineral sources, and thus enable our colleagues to form some idea of the applicability of these waters to cases that may fall under their observation.

TEPLITZ. The work before us* treating of this celebrated resort of invalids and others, is by Dr. Perutz, who has long resided there. It is highly creditable to his diligence and zeal for the homœopathic cause, and might serve as a model for imitation by those of our colleagues who dwell near our once celebrated, and still not ill-frequented mineral waters.

Teplitz lies in a valley of considerable elevation in the north-western part of Bohemia. It is accessible since 1851 by railway, from the north and from the south. There are several springs both in Teplitz and in the adjoining town of Schönau. The water from all the springs is hot, and contains but a very small quantity of mineral matter, from 45 to 49 grains in every ten pounds of water. The chief constituent of this mineral matter is carbonate of soda, which constitutes more than the half of the total amount. The other constituents are sulphate of potash, sulphate of soda, phosphate of soda, fluo-silicate of soda, chloride of sodium, carbonate of strontian, carbonate of lime, carbonate of magnesia, carbonate of manganese, carbonate of iron, phosphate of alumina and silica. The different sources differ very little from one another in composition.

It is worthy of remark, that the most renowned and curatively the most powerful mineral waters on the Continent, are precisely those that contain the least proportion of mineral matter, witness Teplitz, Gastein, Pfeffers, &c.

The waters of Teplitz, on account of the well an[illegible]ated

* Die Thermalbäder zu Teplitz [illegible]
Homöopathie aus betrachtet [illegible]

and remarkable cures they effect, as also on account of the almost infinitesimal amount of their mineral contents, offer a peculiar attraction to the homœopathic physician, and invite his investigation of their physiological action. Accordingly Dr. Perutz is not the first homœopathist who has subjected them to a careful study. In 1832 Dr. Gross gave to the world a pamphlet containing the results of the experiments of Dr. Hromada, a homœopathic physician, then resident at Teplitz, and these contain some valuable hints respecting the curative sphere of the waters. Dr. Perutz has subjected them to a still more careful and extended series of investigations, and in the work before us he gives us the whole of the symptoms observed, by both himself and Dr. Hromada. We do not hesitate to reproduce them here, as they may be useful to our English colleagues.

Dr. Perutz does not inform us how the mineral water was used in order to produce the symptoms he observed; he only says that they were obtained from experiments on himself and on several healthy individuals.

Pathogenetic effects of the Teplitz waters.

Symptoms generally present. Sleepiness. Weight and confusion of head. Roaring in the ears. Vertigo, as if from taking alcoholic drink. Nausea and faint feeling. Anorexia. Thirst. Constipation. Turgor of the skin, with profuse perspiration. Weariness and heaviness of the limbs. Tearing, drawing, and shooting pains in the limbs, especially in their joints.

Skin. Prickling in various parts. Prickling as with needles, especially in extremities. Redness of skin, with increased turgor. Great chilliness. Increased sensitiveness to draughts. Copious perspirations. Sour and mouldy-smelling sweat. Miliary rash on different parts of the body, most frequently on the extremities and chest. Small furunculi that suppurate. Eruption of small pimples over the whole back, that occasion severe
ing pain, nothing of the sort on the front of the body.
ion on the chest, like scabies pustulosa, with violent
in.
leepiness by day. Uncomfortable dreams at night.

Lively dreams, with increased sexual desire. Restlessness and tossing about in bed. Frequent jerks in the act of falling asleep. On awaking, weariness, heaviness in the limbs, and confusion of the head. On going to sleep frequent cramps in the calves and thighs.

Fever. Shuddering. Rigor alternating with increased temperature of the body. Sensation of prickly heat, followed by moderate perspiration. Sensation as if warm water were running down the back. Quick, full pulse, with palpitation. Quick, hard pulse, with confusion of head, and thirst.

Mind. Irritability, with disposition to weep. Anxiety. Bad spirits and absence of thought. Indisposition to work of all kinds. Weakness of memory.

Head. Vertigo and faintness. Vertigo with staggering gait, as if slightly intoxicated. Vertigo with noise in the ears and dimness of vision. Vertigo with feeling of paraplegia. Confusion of head with aching over eyes. Throbbing headache in the vertex. Aching in occiput. Frontal headache with inclination to vomit. Tearing in temples and occiput. Shooting in various parts of head. Soreness of the hairy scalp, so that every hair causes pain when it is touched. Tensive, stretching headache, as if the head would burst. Tearing in the head, with pain in the throat, so that he could not breathe freely. Burning pain, beginning in the right temporal bone and extending to the right concha and cheek. On moving the head a pain in it, as if something fell from one side to the other, with weakness of memory. The hair falls out much. Eruption of vesicles on the scalp. Large soft moveable lumps on the head, as big as pigeon's eggs, with erysipelas in the face.

Eyes. Aching and burning in the eyes. Redness and erysipelatous swelling of the lids. On the right eyelid two [illegible], that go away without suppurating. Inflammation of the [illegible] of the eyelid and ball of the eye [illegible] are closed up in the morning with [illegible] of dryness in the right eye, and d[illegible] in the upper lids, so that they cou[illegible] hand, but when the hand is remo[illegible] again.

Ears. Noises in the ears. Tearing, shooting pain first in one ear, then in the other. Dulness of hearing, with sensation as if something stopped up the ears. Pain in the interior of the right ear, as from a red hot coal. Purulent discharge from the ear. Swelling of the left concha, with erysipelatous inflammation.

Face. Aching over the root of the nose. Swelling and paleness of face. Swollen red face, with throbbing headache in right temple. Vesicular erysipelas in face. Drawing and tearing in face. In right side of face, from forehead to lower jaw, tearing, with drawing of the jaw awry and difficult speech. Scaly eruption covers the left half of the face, extending to behind the ear. Eruption on the chin of pustules as big as peas, which regularly burst on the second day, form scabs, and leave white marks.

Mouth. Vesicular eruption on the upper lip (herpes labialis), which dies in a few days, and forms yellow scabs. Pustular eruption at the commissures of the mouth. Swelling of tongue with profuse secretion of saliva. White coating on tongue with insipid taste. Yellow coated tongue with bitter taste. Dryness of mouth with burning of tip of tongue. Vesicles on back of tongue with burning pain in throat. Heaviness of tongue on speaking, as if paralysis were commencing. Spasmodic projection of the tongue, with inability to speak. Paralysis of tongue; in spite of the utmost efforts he cannot move it in the slightest degree: this lasts eighteen minutes. On the inside of right cheek several small vesicles which burst and form ulcers.

Teeth. Tearing through both rows of teeth. Frequent bleeding of gums with loosening of teeth. Violent boring pain [illegible] the upper molars. Sensation as if the upper and lower [illegible] were lengthened and inability to chew with them. [illegible] toothache: the right cheek and lower jaw were drawn [illegible] left side, preventing proper speech. Violent tooth- [illegible] all the teeth were suddenly pierced with a hot iron.

[illegible] al glands. Tearing drawing pains [illegible] ness of neck. Shooting in right [illegible] ng of uvula and tonsils, with [illegible] in in swallowing, without

visible alteration in the affected organs. Pain in throat without redness. Moist tongue. Headache. Tearing in hands and feet. Pain in chest. Cough.

Appetite. Anorexia with white viscid coating on tongue. Anorexia with feeling of fulness in pit of stomach. Anorexia with eructations and sour taste. Canine hunger, soon satisfied, and followed by stomachache. Dislike of animal food. Variable appetite: at one time great hunger, at another no appetite.

Stomach. Full feeling in stomach, with great development of wind and eructation. Aching in stomach, extending through to back. Nausea and inclination to vomit, but not actual vomiting. Nausea with some vomiting. Heartburn with flow of much water into mouth. Pain in stomach with burning rising up into the throat, as if a red hot coal lay there; it is relieved by drinking cold water. Sensation as if the stomach were full of water, it seems to splash about when walking.

Abdomen. Tearing pain in umbilical region. Tense, swollen abdomen, with discharge of much flatus. Colic pains with discharge of bright red blood by stool. Shooting in right hypochonder, especially on drawing a full breath. Tearing bellyache from both sides towards the navel. Soreness of abdominal muscles. Cramplike contraction of the recti muscles. Rumbling in the abdomen, without distention or discharge of flatus. Aching and stitches in the loin, which extend to the spine, with difficulty of breathing. Swelling of inguinal glands. In right inguinal ring a swelling as big as a hen's egg, which goes away entirely in a few hours.

Stool and Anus. Constipation, with pain in the small of the back and heaviness of lower extremities. Frequent urging to stool, without evacuation. Constipation for several days, with nausea. Several thin frothy stools, with burning in anus. Hard stool, with discharge of bright red blood. Burning in rectum, with evacuation of a viscid secretion mixed with blood-streaks. Profuse hæmorrhoidal hæmorrhage, with [illegible] the symptoms present. Itching in [illegible] humid eruption. Passage [illegible] Painful piles, with violent [illegible]

Urinary organs. Cop[illegible]

urine. Urine as clear as water, with frequent call to pass it. White slimy sediment in urine. Reddish, brick-dust sediment in urine. Flying shoots in urethra. Burning in anterior part of urethra. Retention of urine; he could only pass it by drops, and with violent burning in urethra.

Male genitals. Several vesicles on glans penis, containing clear water, bursting on the second day and leaving a spreading sore, which heals up on the fifth day. Drawing in right testicle and cord. Painful swelling of both testicles, without inflammation. Pustular eruption in scrotum. Suppurating eruption in glans and scrotum, leaving blue marks.

Female genitals. Drawing pain from small of back into pelvis. Feeling of weight in abdomen, and pressure down towards genitals. After violent tearing pains in abdomen, the catamenia occur a fortnight before the right time. Metrorrhagia, with frightful tearing pain in abdomen; the blood is quite black and coajulated. Milk-white leucorrhœa, like boiled starch. After pain in hypogaster, as if every thing would be forced out below, the catamenia which had never appeared occur very copiously.

Nasal mucous membrane. Frequent and profuse epistaxis. Frequent flow of mucus from both nostrils. Prickling and feeling of dryness in nose. Severe cold in the head.

Windpipe. Feeling of dryness and roughness in larynx. Hoarseness, almost amounting to loss of voice. Dry short cough. Feeling of tickling in larynx, causing constant tussiculation. Cough, with expectoration of viscid, yellow mucus. Aching pains in larynx, worse when not swallowing than when swallowing. Raw feeling in the trachea. Burning in trachea, with expectoration of lumps of viscid mucus. Severe catarrh of the trachea.

Chest. 1. *External thorax.* Shoots in intercostal muscles. Tearing in pretoralis major up to shoulder. Pressure and weight in the centre of the chest, which becomes worse on

Burning beneath sternum. Fine pricks, as

ight breast. In right breast two lumps as

ll pain. Scarlatina-like redness on the

earing on the pressure of the finger.

Burning pain in hip bone, worse particularly at night. Bruised pain in both hip-joints. Tearing in glutei down into thigh. Crushed feeling in head of thigh bone. Pains in hip-joint, with feeling as if the leg were too long; when he treads the bone seems to be out of the joint. Coldness and deficient sensibility in thigh. Vesicular eruption in upper third of internal surface of thigh. Pain in thigh when walking, as if it would break. Cramp-like jerking in muscles of thigh. Numbness in thighs and legs. Intolerable aching in thigh bone with cold feeling, but without external coldness. Drawing tearing pain in thigh down to knee. Paralytic pain in thigh impeding walking. Feeling in thigh as if the flesh were hacked off the bone. Aching pain in thigh, as if a broad iron band were firmly bound round it. Swelling of knee-joint with stiffness. Aching pain in patella. Cracking in knee-joint on moving it. Shooting pain through knee-joint. Continued burning in left knee-joint. Bruised pain in legs. Heaviness and weariness of feet. Deep boring pain in middle of tibia, worse at night. Three or four ulcers form on the legs, beginning with burning pain, then breaking and spontaneously healing again. Blisters on both legs, like erysipelas bullosum. Cramp in calves after moderate exercise. Tension in tendo Achillis preventing him putting his foot to the ground. An eruption in left popliteal space that spreads over the middle of the calf. The left leg swells in the middle a little; the swelling increases and is the seat of throbbing pain; after eighteen days the place bursts, and the wound thereby occasioned and the swelling of the bone increase daily; in twenty days it was healed up again. Erysipelatous inflammation of left ankle and top of foot. Feeling of sprain and stretching of ankle-joint. Violent tearing in ankles and toes. Cutting pain in ankle-joint when walking. Tearing pain in dorsum of foot extending over the shin bone. Great burning in heels. Weariness and burning in soles, as if after a forced march. Swelling and painful tearing in great toe. Shooting jerking in great toe. Aching [illegible] in bone of left ankle, extending up to knee; [illegible] the foot becomes stiff. On [illegible] shooting pains in met[illegible] them.

The above pathogenesis would lead us to infer the utility of the Teplitz waters, on homœopathic principles, in a considerable number of diseases; and the following enumeration of maladies they have been found successful in, includes those affections which we should *a priori* have deemed them serviceable for.

Affections of the skin. Scabies, especially the inveterate pustular form; also affections resulting from repercussion of itch, such as psoric rheumatism, asthma, neuralgia of the extremities, inflammation of the knee and hip-joints, &c. Lichen, when not dependent on scorbutus or syphilis. Lichen hæmorrhoidalis, which usually attacks the scrotum and perinæum, and often changes into eczema ani. Prurigo and pruritus cutaneus. Eczema, especially e. rubrum and e. impetiginosum. Pityriasis whether occurring on the scalp and face or covering large portions of the skin. Ulcers, especially those of a torpid character, not sensitive, with pale and relaxed or hard and callous borders, uneven surface, and secreting a copious, thin fetid discharge. To this class belong the so-called psoric, gouty, scrofulous, atonic, varicose, mercurial and fistulous ulcers.

Affections of the fibrous and fibro-serous membranes and ligaments. Gouty and rheumatic affections of these parts are those for which the Teplitz waters are most suitable. Chronic gout and its effects is the kind best adapted for Teplitz; and patients derive much benefit from the use of the waters during the interval of acute attacks. Chronic rheumatism of the joints, muscles, and internal organs, is often cured at Teplitz. More particularly are these waters useful in chronic gout and rheumatism of the capsular ligaments of shoulder, elbow, wrist, finger, hip, knee, ankle, and toe joints; in chronic gout and rheumatism of the tendinous aponeuroses of the legs and arms. and the muscles of the nape, back, and abdomen; in chronic gout and rheumatism of the tendinous structures of the scalp, of the periosteum of the jaw, of the teeth, the hollow bones, the ments of the vertebræ, &c.; also in the so-called gonorrhœal natism.

ions of the mucous membranes. These consist chiefly

of chronic catarrh of the air passages, of the bowels, of the bladder, of the urethra, and of the vagina and uterus.

Affections of the muscular system. Chronic muscular rheumatism is the chief form for which Teplitz is useful, and more particularly the rheumatism of the cranial muscles, of the cervical muscles, of the intercostal and pectoral muscles, of the abdominal muscles, of the dorsal muscles, of the lumbar muscles, of the muscles of the legs and arms. It is, moreover, useful in rheumatism of the cardiac muscles, of the muscular coat of the intestines, of the uterus; also in metallic rheumatism (from the abuse of lead, mercury, or arsenic), and in psoric rheumatism.

Affections of the osseous system. These are rachitis, caries, and tubercles of the bones. White swelling, coxarthrocace and spondylarthrocace are often benefited by the waters.

Affections of glandular and lymphatic system. Principally scrofulous swelling of cervical, axillary, and inguinal glands; scrofulous infiltration of lymphatic vessels; swelling of the testicles; induration of the mammary gland.

Affections of the nervous system. Various kinds of paralytic affections, chiefly those of a gouty, rheumatic, psoric, or metallic character; neuralgias, such as prosopalgia, tic douloureux, sciatica, spinal irritation, cardialgia, gastralgia, enteralgia. Also several kinds of hysterical affections, such as headache, faceache, cardialgia, colic, and many hysterical affections of the joints.

Consequences of mechanical injuries. There are no mineral waters that enjoy such repute for the removal of the troublesome effects of injuries, more especially the racking pain so frequently experienced in broken bones, and evidently so dependent on atmospherical changes. In like manner they have a great reputation in the weakness, contraction, stiffness, and paralysis often resulting from injuries. These healing properties of the Teplitz waters have been justly estimated in Hufeland's work "On the Mineral Waters of Germany." It is this well-known virtue of its waters that has made Teplitz the resort of so many wounded warriors, who at the termination of a cam-

paign, come to regain health and strength to fit them once more for the fatigues and dangers of the camp.

Menstrual irregularities. In amenorrhœa caused by sudden suppression of the catamenia in consequence of a chill; in amenorrhœa following the sudden suppression of the perspiration of the feet; in dysmenorrhœa combined with menstrual colic, when not combined with anæmia.

Hæmorrhoids. Teplitz is especially useful in hæmorrhoidal affections alternating with gout, and in hæmorrhoids accompanied with the troublesome humid eruption about the anus, perinæum and scrotum, that sometimes spreads all over the thighs.

Dr. Perutz next enquires if the action of the Teplitz waters is homœopathic. To this he replies in the affirmative by referring to the striking similarity in the symptoms observed in the healthy by their use, with the maladies which they are known to cure. He also replies to the objections that might be raised to the mass of the water employed, and its mode of administration by means of baths only. He shews that at each bath not more than from $^1/_{10}$th to $^4/_{10}$ths of a grain of the solid constituents of the waters can be absorbed; and he asserts with truth, that it is unimportant to the curative effect whether the medicine be taken into the stomach or absorbed by the skin. As regards the objection that might be raised against the employment of mineral waters, in consequence of their composite character, he says, that as a mineral water is at all times the same in composition it must be regarded as a simple body, although made up of various constituents, just as vegetable substances, though of a very composite character, must be viewed as simple bodies in a therapeutic point of view.

We shall not follow Dr. Perutz in his directions for the use of the baths, in his rules for diet and regimen, &c., but shall content ourselves with extracting from his work a case or two illustrating the curative power of the fountain, of which we might consider him as the (homœopathic) naiad, were it not for his sex.

Rheumatic Gout.

A gentleman, aged 58, thin, livid complexion, had suffered

for several years from rheumatic gout, complicated with hæmorrhoidal affections. After having been treated in every variety of manner by many medical men, he at last fell into the hands of a quack, who treated him so ill that he got worse than ever, and at length resolved to go to Teplitz. When he arrived his complaints were: violent tearing and drawing pains in the shoulder, upper arms, and hands; almost all the finger-joints were more or less swollen, nodulous, and stiff. The pain was worst in both feet, which were much swollen at the ankles and excessively sensitive to touch. At the outer border of the right foot was a gouty node of the size of a hen's egg, that felt doughy; a similar one, of the size of a pigeon's egg, was observable on the corresponding part of the left foot, On both legs traces of the former treatment remained in the shape of numerous cicatrices of cuppings, blisters, and moxas. Appetite very small. Bowels irregular, motions once in three or four days, and then with great pain. For several years there had been no hæmorrhoidal flux, since when he has been subject to attacks of vertigo. The Stadtbad was prescribed at a temperature of 28° R. As he bore this so well the temperature was increased at once to 34° R. After the twelfth bath the gouty pains became so much increased, especially in the feet, that the bathing had to be discontinued for several days. During this time the pains became considerably less, and there occurred very copious sour-smelling perspirations accompanied with a feeling of peculiar comfort. The urine also, which was unusual as to quantity, deposited a large white chalky sediment. Along with these phenomena the tumours on both feet decreased remarkably and became much softer. The appetite improved, and the bowels became more regular. The baths were recommenced. No more pains occurred during the treatment; the gouty nodes on both feet disappeared almost without a trace after using forty-five baths; but the disorganization of the finger-joints remained pretty much as it had been; there was more mobility in the fingers, and the pains were gone, but the swelling remained. In the latter days of the treatment there occurred a copious hæmorrhoidal flux, and the patient left Teplitz in a much better state of health than he had enjoyed for many years.

A gentleman, 36 years old, of weakly constitution and sallow complexion, much emaciated, had long suffered from rheumatic gout, which had produced much deformity of his person. The worst was in his knees, which are very much swollen, and excessively sensitive to the touch. The swelling is elastic, shining, and white; at first sight it might be taken for a white swelling. Both legs are contracted at the knee, so that the patient can only advance with difficulty by the help of two crutches. The pains in the knees become so much worse at night as to deprive the patient of all sleep. The digestion is very weak, with great tendency to acidity. The bowels often constipated for several days. The patient took the Stadtbad at 30° R. The pains lessened after the first bath, and were scarcely felt in the bath itself. The skin, which had previously been always dry, commenced to perspire slightly. The temperature of the bath was now increased to 36° R. By this the transpiration of the skin was increased, and about three or four times more urine than usual was passed; for several days there was a pretty considerable rose coloured sediment. From this time forward the health of the patient grew daily better, the sallow complexion gave place to a blooming colour on the cheeks; the sleep was no longer disturbed by pain; and the swelling of the knees in four weeks became so much ameliorated, that he could stretch out both legs and walk without difficulty with the aid of a stick. After six weeks he could even dispense with this, and the patient himself was astonished at the rapidity and perfection of his recovery. He took in all thirty-six baths.

Gonorrhœal Rheumatism.

A gentleman, aged 46, previously always in the enjoyment of good health, had, two years previously, contracted a gonorrhœa which was suppressed in three weeks by means of copaiba. Soon afterwards, however, he experienced a tearing pain in the left knee with swelling and stiffness of the joint. The bursa mucosa was swollen to the size of a hen's egg, was rather hard and painful to the touch. The patient took the Schlangenbad*

* The name of one of the Teplitz baths—not to be confounded with the bath of the same name at Nassau.

baths at 28° R. After the tenth bath he felt a drawing pain in the urethra with scalding on passing water; the urethra was much reddened and painful on pressure. The baths were continued at an increased temperature, and two days afterwards a profuse blennorrhœa of the urethra occurred. After this had continued a fortnight the pain and stiffness of the knee went quite away; the bursa was much diminished in size and softer to the feel. The discharge went off gradually, and the patient was completely cured.

Effects of a Wound.

A forester, while in the pursuit of thieves, received a shot through the left thigh. The ball entered on the inside of the thigh, about four inches above the knee, and came out at the outside of the thigh at its upper third. The track was therefore in an oblique direction from below upwards, and from within outwards. Both wounds were completely cicatrized, but there was a violent tearing drawing pain, which extended to the heel, and often caused cramp-like contractions of the extremities; there was also an extreme sensitiveness to atmospheric changes. The patient also complained of a sensation of paralysis and numbness in the affected limb, and great weakness of it, so that he could not walk above a few steps without feeling excessively tired. He took the Stadtbad baths at 30° R. and latterly at 35° R. Although the pains became more intense after the first few baths, still a marked diminution of the paralytic sensation was observed, and the limb had evidently gained in strength. These pains soon subsided, so that the douche could be used, and its beneficial effects were not long of appearing. After four weeks of the baths, not only had the violent pains and the sensitiveness to atmospheric changes entirely disappeared, but the original strength and usefulness of the affected limb were completely restored, so that walks of several hours' duration could be taken without fatigue. The numb feeling too had quite gone off.

Effects of a Broken Bone.

A gentleman, aged 29, got an oblique fracture of the tibia,

by the kick of a horse. The fracture united in six weeks, leaving an enormous callus, and the whole leg became the seat of violent tearing pains. Eight months afterwards the patient came to Teplitz, when the callus had lost nothing of its size and the rheumatic-like pain in the fractured bone was as bad as ever. There was no trace of inflammatory action. The patient bathed in the Steinbad at 29° R. After the first bath the pains became worse, but soon went off entirely. The immense callus diminished gradually, and after thirty baths nothing but a slight unevenness was perceptible on the bone. The affected leg, which formerly was easily tired, gained so much strength that the patient could walk ten or twelve miles at a stretch without fatigue.

Eczema.

A gentleman, aged 42, full-blooded, liable to congestions and vertigo, had suffered for many years from eczema scroti, which extended from the scrotum a hand's-breadth over the inner surface of the thighs. The affected skin is red, thickened, and covered with thick yellow crusts, proceeding from the dried or scratched eczema vesicles. The linen is stiffened and coloured yellow by the discharge, which has a bad smell. I ordered the Herrenhausbad at 27° R. without effect. I then prescribed half-baths at 32° R., during which the patient had cold compresses on his head. Great amelioration followed; the scabs fell off; the redness became paler; and the skin regained its normal appearance: no new vesicles appeared, and nothing abnormal could be discovered even by the aid of a lens.

The above is a tithe of the cases given by Dr. Perutz in his book, which we must regard as a model for writers on mineral waters. It should be borne in mind that Dr. Perutz is not the worse homœopathist for his advocacy of the waters of Teplitz in the cases for which they are suited, and that he is guided in their administration as much by his knowledge of their pathogenetic effects as by their traditional reputation. In fact, one of the most striking things in his work is the manner in which the therapeutic power of the waters is shewn to be

founded on their homœopathicity to the diseases they are famous for.

LIPPSPRINGE. We do not suppose that this source is much known beyond Germany. It seems, however, to enjoy a considerable repute among the Germans, and has occupied the attention of several resident physicians, by whom it has been disinterestedly praised for virtues, the possession of which by it seems rather doubtful. Its therapeutic qualities, or the confluence of patients to it, or both influences combined, induced our homœopathic colleague, Dr. Bolle, of the neighbouring town of Paderborn, to make it his head-quarters during certain of the summer months, when patients most do congregate at German Brunnens. Like a good homœopathist as he is, he immediately commenced making physiological experiments on healthy individuals, before venturing to administer it to the sick. He has now had an opportunity of employing the waters in practice for six years, and accordingly is well qualified to pronounce an opinion on the subject of their powers. And an opinion he has pronounced,* which is directly opposed (*schnurstracks entgegengesetzt*) to that of the allopathic doctors of the place.

As regards the nature of the Lippspringe waters, we are informed that they are thermal and what we would call saline. Their chief mineral constituents are, sulphate of soda, sulphate of lime, sulphate of alumina, carbonate of lime, carbonate of magnesia, carbonate of iron, chloride of sodium, chloride of magnesium, and bi-carbonate of soda, with a trace of iodine; but what they are most remarkable for is, a considerable quantity of free gas, mostly consisting of nitrogen.

The effects on the healthy are thus enumerated by Dr. Bolle:

Head. Heaviness. Sleepiness. Vertigo. Headache with drawing in the nape. Noises in the ears.

Eyes. Redness of sclerotic. Encanthitis. Dazzling.

Circulation. Palpitation at night. Pulse sometimes quicker, sometimes slower, sometimes unaltered.

Respiratory Organs. Tightness in chest. Full feeling in

* Nachrichten über Lippspringe von Dr. Bolle. Paderborn, 1855.

chest. Pectoral anxiety. Feeling of compression of lungs. Necessity of breathing deeply. Fine transient stitches in apex of lungs and shoulders. Tickling roughness and dryness in windpipe. Hæmoptysis. Blood fluid. Cough with fetid mucous expectoration.

Digestive Organs. Great appetite. Eructations. Nausea. Fullness and rumbling in bowels. Attacks of colic with sour vomiting, without loss of appetite. Burning in stomach. Pressive pain in abdomen. Much flatulence. Constipation. Bloody motions. Shooting, burning, bleeding piles. Itching in anus. Loss of evacuating power. Shooting pains in liver. Prickling in left hypochonder. Ineffectual call to stool with pain as of diarrhœa.

Urinary Organs. Very frequent call to urinate, with profuse flow and constant desire, even though the bladder contain little. Urine pale, clear, watery. Sp. gr. of urine 1003½—1007, whereas after drinking a similar quantity of ordinary spring water, it was 1021; it reacts more slightly with litmus paper than normal urine, and sometimes not at all; the normal uric acid was almost always entirely absent; a very small proportion of urea; less urophæine than in normal state.

Sexual Organs.—Female. Increase of vaginal mucus with some traces of blood in it. *Male.* Mucous secretion at end of urethra. Increase of smegma.

Skin. Fine pale-red, discrete, lentil-sized eruption, itching violently; sometimes changing into pemphigus-like blisters containing a muddy fluid. Chilliness and rigor with thirst.

Extremities. Weariness of legs. Drawing in calf, followed the next day by a pale red papular rash on the calf. Severe paralytic pain in the tibia, anteriorly at its upper end. Transient pain shooting from the knee to the ankle. Desquamation of the epidermis, and humid, almost ulcerated itching excoriation, on a spot of the leg where twenty years previously there had been an obstinate (varicose ?) ulcer.

From the above pathogenetic effects Dr. Bolle infers the chief action of the Lippspringe waters to be the production of venous congestion. The bloody stools, the bloody leucorrhœa, the

development of hemorrhoids and the hemorrhage therefrom, are decidedly, he says, venous hemorrhages. It is evident that the hemoptysis is venous also. By assuming a congested state of the capillary veins of the mucous membrane of the lungs, a ready explanation is afforded of all the symptoms connected with the respiratory organs. Venous congestion, he affirms, explains all the other symptoms observed in other organs, including the constipation and the genital symptoms. Hence, he alleges, the Lippspringe waters are indicated in general in diseases which arise from repletion of the venous system, as plethora abdominalis, with its consequences, constipation, internal bleedings, dry and fluent hemorrhoids; also venous hemorrhage from the lungs, the uterus, (and the bladder?) chronic catarrh of the air-passages; also the sequelæ of ill-cured inflammation of the lungs, the after-effects of influenza, &c.

Cases of these diseases cured by the Lippspringe waters have been detailed by Dr. Bolle in the *Allg. Hom. Zeitung.* One of the symptoms on the extremities led Dr. Bolle to try the waters in varicose ulcer, and with perfect success. The case was that of a lady who had suffered for years from this kind of ulcer, which had been fruitlessly treated both allopathically and homœopathically. A cure was effected in five months. The action of the waters on the urine indicated in the pathogenesis leads Dr. Bolle to infer their curative powers in Bright's disease, and other maladies accompanied by a diminished allowance of urea in the urine.

The diseases of the lungs for which Lippspringe waters have been hitherto employed by the allopaths, were chiefly those of arterial congestion and hemorrhage, for which Dr. Bolle, judging from his pathogenetic experiments and his experience in disease, asserts that they are not only not indicated but are highly injurious.

We shall not attempt to decide which has the best of the controvesy, Dr. Bolle or his opponents, we may only state that Dr. Bolle makes out a very plausible case for his view, but we cannot consider his experiments as sufficiently striking or extensive to determine the point. All we can say is, that Dr. Bolle

has set an example worthy of imitation by our countrymen practising in the neighbourhood of mineral sources.

KREUZNACH. Though we cannot yet offer a homœopathic proving of the waters of Kreuznach, we think it may be interesting to our readers to call attention to the very striking facts in reference to its therapeutic powers, contained in a small pamphlet * before us. The author, Dr. Prieger, is, we believe, a highly respectable practitioner, and not unknown to the medical world by various articles on uterine disease. After minutely describing the pathology and symtomatology of hypertrophy and fibrous tumour of the uterus and ovaries, which we need not repeat here, he proceeds to give the result of his experience of the effects of the waters of Kreuznach upon them, and the following is his resumé.

"Since I began practice here I have had eighty-six cases of hypertrophy and hard tumours of the uterus and its appendages under my care. Of these cases, by the use of the Kreuznach waters, in a few cases with, in most however without, other remedies,

"1. Thirty-one cases were completely cured, so that neither by external nor internal examination could any trace of the disease be discovered, and the symptoms dependent on the disease had either completely or mostly disappeared. Of these two were hypertrophies of the whole of the uterus, sixteen partial hypertrophies of the uterus, six fibroid tumours of the uterus, and seven tumours of the ovaries.

"2. Twenty-nine were nearly cured, the size of the morbid enlargement being very much reduced, and the accompanying symptoms either entirely or nearly removed; but still the hypertrophies or tumours were not quite gone. Of these three were hypertrophies of the whole uterus, four partial hypertrophies of the uterus, nine fibroid tumours of the uterus, five fibroid tumours of the ligaments, six ovarian tumours, and two ovarian tumours with hypertrophy of the uterus.

* Ueber Hypertrophie und die harten Geschwülste des Uterus und seiner Anhänge, sowie den Einfluss des Kreuznacher Mineral-Wassers auf dieselben, von Dr. Oscar Prieger.

"3. Nineteen cases were improved, in so far that the hitherto steady increase of the tumours was checked and brought to a perfect standstill; but yet there was little or no diminution of the size of the tumours. Of these two were hypertrophies of the uterus, eight fibroid tumours of the uterus, four fibroid tumours of the ligaments, and five ovarian tumours.

"4. Seven cases were in no way altered; neither in the size and nature of the tumours, nor in the symptoms they occasioned. Of these two were fibroid tumours of the uterus, four fibroid tumours of the ligaments, and one hard ovarian tumour."

Dr. Prieger makes a curious observation, to the effect that in the great majority of cases in which the waters were of use, their first effect was to increase considerably the size of the morbid mass, and that it was only in very few cases that this—homœopathic aggravation as we would call it—was not observed.

The mineral water is used chiefly in the form of total baths and local applications in the form of douches, fomentations, and cataplasms. The water is also drunk to a certain extent, and the local applications often consist of the concentrated brine called *Mutterlauge.* Spongio-piline is much used by Dr. Prieger in these local applications.

Dr. Prieger gives several illustrative cases. We subjoin one of them, not because it is the most striking of the series, but because it is the shortest, and therefore the most suitable for the space at our disposal.

"Frau von E., 42 years old. Sixteen years ago she had given birth to a daughter without any unusual suffering, and thereafter had enjoyed pretty good health. Since her confinement however she had always had a small amount of leucorrhœa for some days after every menstrual period. When 38 years old the catamenia became more profuse, and after some time it amounted to real metrorrhagia, mingled with large masses of coagulated blood. During the interval she suffered from a feeling of coldness and weight in the small of the back. The last symptom increased regularly and rendered walking difficult. Her medical attendant examined her internally, and found a hypertrophied state of the whole uterus, with inflammatory irritation. By means of local and general bloodletting in

connexion with internal remedies, the inflammatory condition was removed, the metrorrhagia ceased gradually, and the catamenial discharge became reduced to its normal quantity. In spite of the internal use of iodide of potassium combined with vegetable extracts, continued for several years, the hypertrophic state of the uterus continued, accompanied by leucorrhœa and other symptoms. Under these circumstances Frau von E. was put under my care in 1849. On examination I found the uterus swollen to the size of a man's fist, almost filling up the small pelvis; its fundus was easily felt of a semicircular form through the abdominal wall, extending half a hand's breadth above the pubes; and to the touch appeared to be a hard, smooth and not very sensitive structure. There was a considerable discharge of a thick whitish yellow mucus from the os uteri and the vagina, which corroded the external skin; it was worst for a few days after the catamenia. The principal subjective symptoms were frequent inclination to pass water, obstinate constipation, feeling of coldness and weight in the small of the back, drawing from the hips down the thighs, and difficulty of standing or walking. She could not walk more than a few steps without feeling pain, in consequence of which for the last four years she had generally retained a half-lying position and went out in a wheeled chair. The appetite was good, and the digestive functions in good order, with the exception of the constipation. The complexion was sallow and the whole body emaciated. I put her on the internal use of the Elizabethbad spring baths, at first of the natural mineral water, subsequently with a considerable addition of the concentrated brine, as also injections and fomentations. These were borne very well for five weeks, but at the end of that time there occurred a sudden increase of the subjective symptoms, and at night especially the patient complained of periodical shooting pains deep in the pelvis. I found the hypertrophic swelling more sensitive and increased in size. I ordered the discontinuance of the internal use of the waters of the baths, but continued the local applications with plain mineral water. After ten days the pains went off, and the tumour decreased to its former volume. From this time forward the decrease of the tumour

proceeded steadily, so that in a few weeks the patient was herself aware of its diminution, and in the beginning of September, before she left, the projection above the pubes was no longer perceptible. In addition to the leucorrhœa, the signs of pressure on the bladder, the rectum and the pelvic nerves were diminished. She could walk a considerable distance without pain or inconvenience, but I cautioned her against doing too much in that way from fear of some fresh irritation. During the winter she used the local appliances, and rested as much as she could. In the summer of 1850 she returned to Kreuznach. I found when she first came the uterus still somewhat hypertrophied, about the size of a small orange, but its substance was soft and elastic, and on one part a harder knot was felt. The leucorrhœa had been absent seven months, and the strength very greatly increased. The treatment was continued as on the first occasion. The diminution went steadily forward, and after two months the volume and structural consistence were reduced to the normal condition. I now allowed the patient to attempt longer walks, and ere she left Kreuznach she could walk a couple of miles without resting and without inconvenience. Since then her health and strength have continued to improve permanently, as I was able to maintain by personal inspection in 1852."

In chemical composition the Kreuznach waters, as is well known, belong to the class of springs rich in iodine and bromine.

PHLEBITIS OR INFLAMMATION OF THE VEINS.

By Wm. Ayerst, M.R.C.S.E.

(Read before the British Homœopathic Society.)

Inflammation of the venous system was first described by John Hunter in 1793. "I have found," he observed, "in all violent inflammations of the cellular membrane, whether spontaneous or in consequence of accident (as in compound fracture), or of surgical operations (as in the removal of an extremity), that the coats of the larger veins passing through the inflamed

part become also considerably inflamed, and that their inner surface takes on the adhesive, suppurative, and ulcerative inflammation. I have found in many places of the veins adhesions, in others matter, and in others ulceration. Under such circumstances the veins would have abscesses formed in them, if the matter did not find in many cases an easy passage to the heart, along with the circulating blood, so as to prevent the accumulation of pus; but this ready passage of the matter into the common circulation does not always happen. It is in some way prevented by the adhesive inflammation taking place in the veins between the place of suppuration and the heart, so that an abscess is formed, as will be further observed. Where inflammation is most violent, there we find the vein most inflamed; there also, after suppuration, we find the purest pus, and as we trace the vessels from this part either further from or nearer to the heart, we find the pus more and more mixed with the blood, and having more and more of the coagulated parts of the blood in it. As these appearances are only to be seen in dead bodies, they cannot be described but from thence; but it is so common a case, that I have hardly ever seen an instance of suppuration in any part furnished with large veins, where the appearances are not evident after death. I have found them in the bodies of those who have died from amputation, compound fractures, and mortification."

It does not appear that this very acute observer and admirable pathologist and physiologist was aware of the occurrence of uterine phlebitis, though he was the first to give an accurate description of puerperal peritonitis. The resemblance between the part of the uterus where the placenta adhered, and an amputated or wounded limb, and their liability to the same diseases, does not appear to have occurred to him.

Dr. John Clarke observes, in a volume of Essays published in 1793, "that upon cutting into the substance of the uterus pus is often found, which, in all the cases I have met with, is situated in the large veins of the part."

From the close of the last century till 1820, when it was described by Dr. Burns, uterine phlebitis seems to have been ignored by the profession, or at least to have been unobserved.

and unsuspected. These are the words of Burns:—" Pus is often contained in the ovaria and tubes and sinuses of the uterus. In some cases the veins participate very extensively in the disease, and become inflamed to a great distance. Thus inflammation may spread to the heart or liver, or down along the veins of one or both thighs. This is attended with great and debilitating fever, and much pain in the course of the affected veins, which, after death, are found inflamed, thickened, or filled with pus."

The disease is now too well known to require any further quotation of authorities; numerous cases have been published, and the morbid anatomy accurately given.

Uterine phlebitis may result from the mechanical injury of the uterus—whether from the force required for the extraction of the placenta after protracted labour, or from hæmorrhage, or from retained portions of the placenta undergoing decomposition or acting as mechanical irritants, or from whatever may cause uterine inflammation. This disease, in all probability, begins soon after labour is over. There is often little or no local pain to signify its onset. The lochia may be suspended, or be free; be fœtid and puriform, or be quite natural. The uterus may have returned to its natural size. In short the practitioner is only made aware of the presence of this formidable disease by the constitutional symptoms—rigors, great prostration of strength, rapid feeble pulse, low muttering delirium, vomiting or diarrhœa, or both; brown and parched tongue, and symptoms of the absorption of pus into the circulation; whether these symptoms be pulmonary, or shown in other organs of the body. If the substance of the uterus is affected, it is to be felt above the brim of the pelvis, large, hard, and painful on pressure as in puerpural peritonitis. As to the treatment, one of the very highest allopathic authorities on puerpural disease remarks:—

" Inflammation of the veins of the uterus though a dangerous disease, when pus is formed within the vessels, is not invariably fatal." Let us hope we may be able in our treatment to give a more favourable report. But let us be modest in our anticipations and candid in our statements.

The pathological relation as well as the pathogenetic, between

remedy and disease, has indeed to be well considered in the treatment of uterine phlebitis—where it has been accurately diagnosed. Like a false and treacherous friend, the betrayer of our hopes as well as of our trust and confidence, it is often only discovered when it is too late to take measures against it.

Dr. Robert Lee has substituted the term "*Crural phlebitis*" for the old expression *phlegmasia dolens*, and he has done rightly, for he has given a name expressive of the pathological fact instead of one merely hypothetical. The swelling, and the other local and constitutional symptoms of this affection of puerpural women, depend on inflammation of the iliac and femoral veins, and therefore crural phlebitis is a very happy expression for the disease. According to Dr. Lee, this affection commences between the fourth and twelfth days in some cases, but in the majority after the second week after parturition. There is a sense of pain in the direction of the iliac veins, succeeded by tension and swelling of the part; from thence the pain and swelling proceed to the upper part of the thigh, and downwards in the direction of the great blood-vessels to the ham. There is then considerable tumefaction of the thigh, and sometimes the whole limb is considerably enlarged—sometimes the tumefied parts pit on pressure, sometimes not—sometimes there is inflammatory redness; at other times the swelling is colourless, thence the expression "white leg."

You have the usual constitutional symptoms of venous inflammation—rigors, headache, prostration of strength, the pulse rapid and small, nausea, loaded tongue and thirst.

The allopathic authorities vary, in this as in other diseases, in the treatment;—some recommend depletory measures, some tonic. As gangrene is sometimes the result, depletory measures are hardly wise even on their principles of practice,—and besides the disease generally occurs in the feeble and debilitated.

Therefore of the two great evils, the Brunonian would almost seem preferable to the opposite extreme. In the treatment of inflammation of the veins, whether it be in men or women—whether it be after mechanical injury, from large abscesses, or after amputation, or if it be uterine or crural phlebitis in puer-

pural women, the law we have to guide us must influence our choice of remedies. There is no doubt a class of remedies that act more specifically, that is, have a more direct pathological relation to this or that part of the organism. It is in the treatment of such diseases as phlebitis that we are made to feel how little we know of the immense domain of therapeutical agents.

What remedies act more directly on the veins than on the arteries? who is prepared to answer the question with the confidence of a satisfied experience? Aconite, Arsenicum and Arnica; Belladonna and Bryonia; Calcarea, Chamomilla, and China; Iodine, Bromine and Kali hydriodicum; Nux vomica, Ignatia and Pulsatilla; the mercurial preparations; Rhus, especially Rhus radicans, though a high authority says it differs not from Rhus tox.; Lycopodium, Silicea and Sepia; Sulphur as a matter of course—for that "infernal medicine," as Hahnemann calls it, of course comes in—and Veratrum, not to add Zinc, to close the alphabet in Z—are among the remedies recommended for phlebitis. But when we come to the bedside of the patient, and have to deal with the realities of a case—the life or death of the body—we feel the truth of the aphorism of Hippocrates, that

"Art is long and life is short."

One of my colleagues has suggested to me that in all probability the remedies derived from serpents would have, *cæteris paribus,* the most direct influence on venous inflammation—Lachesis, Naja, Crotalus, the viper, and so forth—for the phenomena of venous inflammation correspond, to a considerable extent, with the symptoms produced by the poison of venomous reptiles.

It is worth while to consider the relation between the veins and absorbents. Whenever the veins are obstructed, the absorbents also suffer. Then tumefaction and other phenomena shew the disturbed relation between the venous and absorbent circulations.

It is precisely this disturbance which is occasioned by the action of venomous inoculation of poisonous reptiles. My

friend's suggestion may be, therefore, well worthy the consideration of the Society and of your discussion of it.

The whole question of blood-poisoning, whether from without or within the human body, whether by miasm or the venom of reptiles or the bite of rabid animals, or from the absorption of pus or of vitiated secretions, is a matter of intense interest and vital importance. *Minimis inest maxima vis.* Microscopical pathology is especially worthy of the study of the diligent and earnest homœopathist. The action of our medicines may in this way be ascertained by experiments on the transparent web of the frog, for instance. The power of small forces whether for injury or destruction to life, or for alleviation and cure, have a striking relation between them. A great statesman died a few years ago from the sting of a venomous gnat inflicted on his lip. According to our law that venomous gnat must have medicinal properties. The whole of this interesting subject is obviously most important; but it can only be glanced at in a brief essay like this.

Few attempts have been made to describe accurately the mode by which vitiated secretions find their way into the circulation. The investigation of their actions is frequently tedious and inconclusive from the difficulty of tracing morbid secretions when they become mingled with the blood, and of recognising their presence in the veins; hence the pathology of the solid parts has received a disproportionate share of attention, as the changes of structure in the solid parts appear to have offered a more ready solution as to the origin of the symptoms.

The pus globules being introduced into the system is the most important of this class of disease, although the theory of pus globule circulation in the blood has never been generally believed, supported as it has been by much ingenious reasoning and numerous experiments on the living organism.

Pus is found in a marked manner to favour coagulation, but not immediately as is the case with acids. Healthy pus causes coagulation less rapidly than putrid. The effects of the coagulation of the blood thus produced is to retain the vitiated blood in the part, and to prevent its being carried into the circulation; but accident or design may destroy the coagulations

which fill the vein. If the coagula fill the vein and are undisturbed, complete union may take place, and the vessel close, even should the wound suppurate. Should the canal be open to any secretions that may be introduced into it from the same cause, or any peculiarity of constitution which prevented the original wound uniting, and complete union at any other part of the vein taking place by the first intention, morbid secretions may then travel along the vein, but still cannot be conveyed through the general circulation, thereby preventing such secretions proceeding towards the centre of circulation, and with this tendency to coagulate around pus and foreign matters, we find the vein at different parts obliterated, with pus and lymph secreted in the intervals, and if the purulent matter be allowed to remain for a short time only in the vein, no inflammation will be induced; but adhesive ulceration or suppurative inflammation will be set up, and irritating matter remain in consequence of the blood coagulating around it.

Under ordinary circumstances a vein does not easily inflame, when wounded, but when pus is introduced inflammation is set up, in which the whole system sympathizes: when pus is confined to the cavity of a vein only, the disturbance produced is comparatively trifling as long as it is excluded from the circulation by the coagulation, and should no other change take place the passage of the blood through the vein is again established by the coagulation either shrinking or becoming totally absorbed. The canal is sometimes obliterated, being filled with a substance like the laminated coagulum of an aneurism, and the coats of a vessel are always more or less thickened. No satisfactory information is derived from the examination of the blood to discover the presence of pus, for its character is so altered that there is no means of recognising it.

The veins that open on the placental surface of the uncontracted uterus after childbirth cannot contract independently of the surrounding muscular structure, and their extremities are closed by coagula, which prevent the secretions of the uterus entering; these may be broken down and carried with other matters into the circulation, and other coagula may be formed and in like manner destroyed.

Death sometimes takes place very suddenly after crural phlebitis from dissolution of the coagulum in the veins, merely from the effort of changing the posture, marking with precision the period at which the coagulum is dissolved.

The causes of inflammation of the veins, in which constitutional symptoms supervene, may be classified under three heads.

1st. Those in which the larger veins have been opened.

2nd. Those in which some portion of a bone has been involved in the original lesion.

3rd. Those that occur after child-birth.

In all the above cases uninterrupted communication exists between the injured part and the general circulation (coagulation of the blood being the natural means of closing the communication in the veins of the injured part), a ready passage is open, by which means the blood may become infected—should this intention not be fulfilled from some local peculiarity or constitutional tendency. There can be no doubt that the veins are the means, in the majority of cases, by which the blood becomes infected by the introduction of morbid matters and in the production of secondary deposits.

In abscess of the bones, the unyielding nature of their structure effectually obstructs the escape of any fluid that may be effused; the cells of the bone become infiltrated, and there is nothing to prevent the diseased secretions finding their way into the circulation unless the veins of the part become closed. M. Cruveilhier informs us, that "a single drop of mercury introduced into the cancellous structure of living bone may be subsequently detected in the capillaries of the lung, where it becomes the centre of one or more patches of livid congestion."

This experiment is a fine illustration of the manner in which morbid secretions are conveyed into the circulation when union by the first intention and adhesive inflammation (the natural process of repair) are nugatory, and their channels left as much open to diseased secretions as the globule of mercury in M. Cruveilhier's experiments.

Again, we may infer that a vitiated state of the blood may induce inflammation of the veins; when the contraction of the veins on the placental surface of the uterus is incomplete, the orifices are bathed in secretions that are decomposing, and thus

they are protected by coagula, which will be found extending some distance up their channel, preventing absorption. The coats of the veins through which the vitiated secretions may have passed may not themselves have become diseased, but disorganization may have taken place in veins more distant, such as the spermatic, renal, or others even more remote; hence we may infer that the disease is not propagated along the coats of the vessels, but by their contents. The effect on the blood would be the same whether the diseased fluids were the product of inflammation or absorbed from the cavity of the uterus.

That the symptoms arising from the coagulation of blood in the iliac as well as in other veins, from the absorption of pus, exactly resemble those of crural phlebitis no one will deny, although Legallois asserts that crural phlebitis, puerpural fever, &c., are the consequences of absorption of pus.

Dr. Ferguson observes, "besides depositions of pus in certain parts of the frame, I have seen two other states of the limb which are connected with and traceable to the canal originating puerpural fever. In one of these the malady looks like erysipelas, in the other the leg is attacked with a disease so exactly resembling phlegmasia dolens as to leave no doubt in my mind they are one and the same malady. In this, as in other forms of the disease, there may be a tendency to gangrene of the skin."

The affection of the system in uterine phlebitis is often sudden and general, and the occurrence is marked with much accuracy.

The to all appearance capricious selection of time of the inflammation setting in may be attributed to the time in which the coagula in the veins may be expected to shrink, and is strictly in accordance with the same symptoms after other local complaints.

We observe in inflammation after parturition the spermatic veins are alone attacked, and generally the one on the side where the placenta is attached to the uterus.

That the blood is the means by which this affection is transmitted is proved by the sudden termination of diseased appearances in those cases, nevertheless in these instances the diseased fluid cannot always be traced, although decomposing coagula

or retained placenta are often in contact with the uterine veins without producing the symptoms of local phlebitis.

The following cases are presented, in the hope that they are not altogether devoid of interest:—

CASE 1.—*Inflammation of the right spermatic vein after parturition.* Mrs. L., æt. 28, delivered at her own house, 3rd March, 1856. Labour natural; on the sixth day after confinement had slight rigors, headache, giddiness, great prostration of strength, rapid feeble pulse, which symptoms remained two days. The face now became flushed, eyes red; considerable tremors in the muscles of the face, tongue and extremities; indistinct articulation; pulse 150; scarcely perceptible; respiration hurried; tongue brown, dry, and much thirst; abdomen distended; uneasiness in the hypogastrium on the slightest pressure. Aconite 3, gtt. j, 9 table-spoonfuls, one table-spoonful every 2 hours.

March 14.—Much worse; dozing during the greater part of the day; face flushed; eyes suffused; tongue parched; teeth and lips covered with sordes; much tenderness in both iliac regions; abdomen distended; bowels relaxed; tremors of the muscles much increased. Arsenicum in like manner.

15th.—She has been comatose the last six hours; all the symptoms aggravated; she died in the evening.

A *post-mortem* examination revealed the mouth of the spermatic vein closed, as also the vena cava.

CASE 2.—*Inflammation of Iliac and Femoral Veins.* Mrs. H., æt. 33, confined 10th April, 1854; on the 14th felt pain in left groin, and calf of leg and numbness in the left extremity; the appearance of the limb normal, except slight swelling of the inguinal glands, which were tender to the touch; tongue furred; thirst great, and rigors; bowels open; pulse 90; lochia natural, also the milk. On the sixth day after confinement the pain increased in severity in thigh and leg, more particularly from the knee to groin; the inner side of the limb white, glistening, and much swelled; otherwise much the same as on the 14th; 17th, still much the same, with the exception of the bowels being more confined; 18th, much the same; has only taken Aconite; on the 19th the swelling increased, pain diminished, and now involved the leg and foot; no discolour-

ation of the skin. Lachesis 3, gtt. j, in 9 table-spoonfuls, 1 tablespoonful every 3 hours.

21st.—Swelling rather decreased; pain in groin less. Cont.

24th.—Pain in limb less, except on the slightest motion, which causes intense suffering; finds it easier when lying partially flexed; pulse 100; skin hot, and much mental perturbation. Cont.

25th.—The ham and calf of leg more swollen; the skin smooth, shining and pitting on pressure. In the course of the femoral vein a thick, hard cord could be felt, which readily moved under the fingers, although very painful to the touch, and could be traced 3 or 4 inches down the thigh; pulse 90; tongue furred; much thirst, and lochia absent. Cont.

28th.—The acute pain in limb quite subdued; the extremity œdematous, but she is generally improved. She gradually recovered, although the limb remained for some months very weak, so as to disable her from walking. She is now again pregnant; says she has no inconvenience from the leg.

Case 3.—Mrs. H., æt. 41, delivered 18th December, 1855. Three days after confinement complained of soreness in region of uterus, accompanied by shiverings, headache, thirst, suppression of the lochial discharge; the belly soft and free from pain on pressure, but the uterus could be felt large, hard, and exquisitely tender to the slightest pressure; pulse 128; face pale; tongue white, and much furred; much thirst and general prostration, with depression of spirits. China 3, gtt. j, in 9 table-spoonfuls, 1 table-spoonful every 2 hours.

21st and 22nd.—The symptoms rather aggravated, having disobeyed strict injunctions not to take stimulants; she had been prevailed on to take brandy and water. Cont.

23rd.—Constant vomiting; entire prostration of strength; breathing hurried; pulse 140; feeble and intermitting. Arsenicum 3, gtt. j, in 9 table-spoonfuls, every two hours.

24th.—Sensibility of uterus increased; lochia and milk suppressed; countenance dusky; pulse [illegible] and [illegible]. Cont.

25th.—Much the same, except [illegible]

Cont.

26th.—Abdomen much [illegible]

sitely painful to pr[illegible]

night previous, and sufferings most acute till about nine o'clock in the morning, when she died.

No *post mortem* made; but judging from the symptoms, the deep-seated tissues of the uterus and the peritoneum were inflamed.

CASE 4.—*Inflammation of the Iliac and Femoral Veins extending to the Vena Cava.* Mrs. W., æt. 35, Newman Street. Confined 16th August, 1855, of her third child; labour natural. September 9, three weeks after birth of child, was suddenly attacked with pain in calf of right leg, with entire loss of power of the extremity. Mercurius 5, gtt. j, in 9 table-spoonfuls, 1 table-spoonful three times a-day.

She remained much the same till the 13th, when there appeared much swelling; no discolouration; much tenderness from thigh to groin; loss of power and motion, and pain in the hypogastrium; temperature of limb increased; hot, pale, and glistening; pressure along the course of the crural vessels exciting intense suffering; the femoral vein enlarged and indurated as far as can be traced, and very sensitive; much pain in leg from ham to ankle, where some of the superficial vessels are hard and painful; pulse 80; tongue dry, brown, and thirst. Eight years since, after first child, had a similar attack, and the limb remained for a long time much weakened. Remained much the same until September 18, still under the Mercurius, when the heat and tension diminished, but the pain in the course of the vessels remained. The vein cannot be felt, and the thigh very tender. Cont.

September 20th.—Has pain at umbilicus, loins and pubes; slight rigors; pulse 102; tongue foul, and thirst; pressure at umbilicus causes pain, but abdomen soft. Cont.

22nd.—The limb nearly of its natural size; tenderness gone, but has attacks of acute pain in back and loins, and a rigor of an hour's duration this morning early, followed by profuse perspiration and slight delirium; skin hot and dry; pulse

e brown and parched; on pressing

of deep-seated pain and soreness.

ounfuls, 1 table-spoonful every

size.

24th.—Another violent rigor; pulse rapid and feeble; the countenance denoting the greatest anxiety; leg less. Cont.

25th.—The extremity nearly of its natural size, but had frequent vomiting, with pain in left side, increased by taking a deep inspiration; pulse 120; conjunctivæ suffused; prostration very great, with incessant cough; pulse 145; surface cold and clammy, and diarrhœa.

26th.—All the symptoms much increased after seeing her yesterday. Died this morning.

Post mortem.—Coats of *inferior cava* much thickened; its cavity occupied by a coagulum distending it to its greatest extent to about an inch below the *vena cava hepatica*, and firmly covered with a tough red membrane, so that it was with difficulty removed; the coagulum appeared similar in colour and consistence to coagulable lymph in parts, in others a yellow mass made up of lymph and pus; the left common iliac was plugged with the same substance; the right less than its usual size, containing a firm coagulum composed of layers of lymph; the internal iliac perfectly closed, and like a cord; the femoral vein less in size in its whole length, and adherent to the artery; the superficial and deep femoral were in the same condition, as also the saphena major and minor.

Case 5.—A poor woman who had been delivered by a midwife April 5, 1852, twelve days prior to my seeing her, was suffering severe pain in region of uterus, rigors and absence of lochia, pains extending to left groin down the inner part of the thigh, with much tumefaction of the extremity; the skin hot, pale and shining; pitting on pressure; much pain was incurred by the slightest pressure; the femoral vein in its whole course hard, as also the saphena; much prostration of strength; nausea; thirst and vomiting; tongue furred, brown and dry; pulse 112. Lachesis 3, in 9 table-spoonfuls, 1 tablespoonful every 3 hours.

April 18th.—The limb swollen and painful; much fever; tongue rather better; pulse 100; expresses herself as feeling better. Cont.

20th.—The limb less swelled and painful; fever gone; tongue cleaner; great weakness in the extremity, and cannot

move it at all. Arsenicum 5 every 3 hours, and hot fomentations to be kept applied.

25th.—Much better; says the fomentations gave much relief, and is able to move the limb without pain; the swelling quite gone, and the hardness of the saphena vein gone; still hardness of the femoral, but in a less degree. Cont.

30th,—Her health is returning, and is able to sit up; feels no pain in the limb; pulse 80; tongue clean; appetite good; the foot and ankle slightly swelled; expresses herself as almost well. She eventually quite recovered.

CASE 6.—Mrs. —., æt. 56, a patient of a medical friend, had been in bad health some time; on walking out put her foot on a piece of turnip peel, and fell; when I saw her with my friend the femoral vein in its whole course was hard and painful to the touch; much swelling of the limb from Poupart's ligament to the knee, and disturbance of the whole system; the limb pale and pitting on pressure; tenderness of the hypogastrium; no power of moving the limb. Although this patient was suffering from disease of the heart, she quite recovered.

CASE 7.—A cooper employed in the City, July 7, 1856, while at work, punctured the palm of the right hand; diffuse cellular inflammation of the arm ensued, with enormous swelling of the limb nearly to the shoulder joint, with erysipelatous redness, rigors, rapid pulse, hot skin, perspirations, and flying pains over the whole body; much fever; thirst, and great pain in the limb; tongue coated thickly white; loss of appetite; vomiting; small collections of matter in the hand; hardness of the basilic vein; the countenance expressive of great anxiety; says he has not slept for nine days. Free incisions, hot fomentations to the arm, and linseed poultices to the hand. Arsenicum 3, gtt. j, one table-spoonful every 3 hours.

July 8.—Says the incisions gave him great relief; the arm much swelled; has fever and thirst, and feels better, having had some sleep. Cont.

10th.—Much improved; the swelling of the arm much reduced; the wounds in the hand looking healthy, and a copious discharge of pus; tongue much cleaner; the appetite returned, and altogether looking better. Cont.

17th.—Very much better; the arm quite its natural size, and has no pain in the hand; he came to me after this, and gradually recovered.

ON THE TREATMENT OF ORGANIC DISEASES OF THE HEART,

By Professor Henderson.

Next in importance to the power of preventing and of curing diseases is, of course, that of lessening the sufferings which are produced by maladies which do not admit of being cured—of prolonging life, in some measure of comfort, under circumstances which forbid the entire recovery of health. The proper exercise of this function of the physician requires, I think, often as much professional experience, sometimes much more pathological knowledge, and generally more patience and forbearance than are usually demanded for the success of endeavours to cure diseases that are still remediable. No doubt the patience and forbearance which are necessary are required by the sufferer as well as by the physician, for both are liable, in the absence of these virtues, to seek a transitory relief from pain or importunity, in the employment of means which, in many instances, more than counterbalance, by lasting evil, the temporary calm which they had occasioned. But it is oftener I believe, owing to his misunderstanding the exact nature of the case of disease he has in hand, and the manner in which it is the cause of the sufferings he desires to relieve, that the physician has recourse to expedients which either fail altogether of their object, or add eventually to the miseries they were intended to soothe. In no class of organic diseases are mistakes of this kind more common than among those of the heart, and apparently because of the common error of regarding whatever sufferings are endured by those who labour under these maladies, as the consequences of the organic mischiefs alone, whereas they very often are the consequences of a *superadded* functional disturbance of the action of the diseased organ—a disturbance not the necessary effect of the mere organic change, but of a cause or causes which in one way or another make the

diseased organ to act, in respect to frequency, regularity, or force of its pulsations, in a different manner from that in which it would act if such cause or causes of additional disorder were absent: the organic, anatomical change in its constitution remaining the same.

These observations apply with especial force to two of the most common of the organic diseases of the heart: eccentric hypertrophy of the ventricles (which, in its worst forms, is usually associated with incompetency of the aortic valves), simple narrowing, and patency, of the left auriculo-ventricular orifice, with their customary attendant, eccentric hypertrophy of the right ventricle. These are the diseases of the heart in the course of which I have most frequently met with occasional exacerbations of suffering from dyspnœa, dropsical effusions, and the other accompaniments of advanced heart disease; but no doubt any organic disease of the heart which entails either a liability to interruption of the free passage of the blood through the organ, or to increased energy in the propulsion of blood from its chambers, may, owing to the operation of causes of irritation which excite the organ into unusual frequency, or unusual vigour of contraction, or both together, present examples of the same exacerbations, which, under suitable management, may be remedied for the time, or may be sustained or aggravated by improper treatment until a prematurely fatal issue is the consequence.

To advert first to the cases of narrowing, and of patency of the left auriculo-ventricular orifice: it will be easily understood how a considerable increase in the frequency of the contractions of the heart must operate in retarding the passage of blood through the organ, when it is remembered that every contraction occasions, in the case of simple narrowing, a temporary stoppage in the current of blood passing from the auricle to the ventricle, already made too slow and difficult by the diminution of the passage, and that, in the case of patency, every contraction of the ventricle is the cause of a reflux of blood into the auricle. While the heart is beating with moderate frequency and regularity, the transmission of blood through it, if the disease be not in its most advanced stage, may be effected with a facility sufficient to prevent discomfort, and

to give no occasion for an oppressive turgidity of the vascular system of the lungs, or of any other part of the body. But great is the change when the pulsations of the heart are accelerated, whether by rapid walking, ascending a staircase or rising ground, by derangements of the digestive organs, or by a slight bronchitis. If the disturbance be but for a few minutes, the sense of oppression at the chest, though it may be intense for the time, subsides as the heart's action becomes moderated; but if days of the accelerated action have to be endured, the distress from dyspnœa increases so much, that recumbency at night and sleep may be impossible, and œdematous swelling about the feet and ankles may appear before the former state of comparative health begins to be restored; and if weeks of the increased rapidity occur, the sense of suffocation, dropsy, harassing cough, and mucous exudation into the bronchial tubes may persist and increase until dissolution ends their progress, and that, too, though the principal malady, the organic disease, remained the same as it had been months before, when existence, with reasonable care, was enjoyed without any, or with but little, discomfort.

Not long ago, a striking example of this worst result occurred under my observation. The disease, in a lady of some thirty years of age, was patency of the left auriculo-ventricular orifice. I had known its existence for about fifteen years or more, and had on many occasions, during the latter half of that period, of attending the subject of it while suffering from irregular and rapid action of the heart, and difficulty of breathing, brought on sometimes by inconsiderable attacks of bronchitis, sometimes by dyspepsia with acidity and flatulence. Her last illness began, as many had previously done, with a somewhat loaded tongue; defective appetite; flatulence in the stomach and bowels with constipation, all of them in a very insignificant degree when my attendance began, and as yet without any alteration in the symptoms of the heart disease. When in this, its ordinary tranquil state, the pulsations, though rather stronger than in a healthy person, were regular, of moderate frequency, about 72, while the pulse at the wrist was of good size and ordinary firmness. The special sign of disease was the usual clear bellows-murmur during the contraction of the

ventricles, audible chiefly to the left of the sternum and towards the apex of the heart, and with nearly equal intensity behind, between the base of the left scapula and the spine. Owing to a peculiarity of temper, which it was often difficult to manage, the treatment was not on this occasion regarded with favour, the remedies recommended were either neglected altogether or taken rarely and at random, and the dietetic restrictions were disregarded. Perhaps the sense of illness was not at this time so great as to seem to call for any particular care or treatment; indeed, among the last injunctions I had occasion to give, was one relating to a dinner party which the patient was bent upon enjoying, gainsay it who chose. Owing to these unsatisfactory circumstances, I intermitted my attendance, and was soon superseded by an allopathic practitioner. Matters became rapidly worse, and in a short time, to much gastro-intestinal disorder there were added jaundice, much and continued dyspnœa, general anasarca, hydrothorax, and bronchitis, which terminated fatally within eleven weeks from the commencement of the allopathic treatment, which, I have no doubt, was of the usual description, and, among the rest, consisted of Digitalis, opiates, and blisters to the chest. A few days before her death I had an opportunity, while visiting another member of the family, of seeing the subject of this sketch, and remarked that, though the symptoms referable to the heart and lungs composed the predominant and urgent features of the illness, the exciting cause of the very irregular and accelerated action of the heart, so different from what was observable but a few weeks before, and on which the dyspnœa and dropsy depended, was manifestly still in the digestive organs, where the new disorder had originally been; for the tongue was here and there raw in patches, and the jaundice had come on before it could be ascribed to the congested state of the chest.

Rarely preserving notes of the treatment of such intercurrent disorders as from time to time disturb the action of hearts organically diseased, and occasion sufferings characteristic of diseases at the centre of the circulation, I can furnish at present but one pretty complete narrative of the kind. It is the case of a gentleman, in whom the sufferings proper to disease of the

heart were so subdued, by treatment directed to the cause of the superadded functional disorder, as apparently to prolong life for several years. The organic disease was hypertrophy of the ventricles, with incompetency of the aortic valves. How long this state of disease had existed in the heart, or when it had commenced, could not be ascertained. The following are my notes of the case.

Jan. 7, 1851.—To-day an intelligent allopathic surgeon from a country town called on me, accompanied by his patient, a gentleman of 53 years of age. The latter appeared much older than his actual age, and altogether presented an appearance of suffering and decay, very unpromising for medical treatment. He was thin, exhausted, and anxious looking; and his face and bald head were of a dingy yellow colour. His pulse was 96 after resting a-while, very large, full, and jerking. The impulse of the heart without being of remarkable strength was unduly diffused, giving the impression to the hand of a large body moving within the chest, and occupying a much larger space than the healthy heart does; and the percussion sound was dull over a much greater extent than usual. At the parts of the chest corresponding to the base of the heart, and to the course of the ascending aorta, a double bellows murmur was audible. The beat of the radial artery, and the impulse of the heart, were synchronous.* Any exertion produces a sense of oppression and breathlessness, and he cannot get down his head at night owing to the same cause. This breathlessness on lying down had happened only for a few weeks past.

The percussion sound was good over the left side of the chest,

* This synchronousness of the pulse at the wrist with the beat of the heart occurs in incompetency of the aortic valves only when the heart's action is accelerated. When the pulse is only about 70, there is a more or less notable interval of time between the beat of the heart and the radial pulse; they sometimes actually alternate. This is owing to the aorta emptying itself partially back into the ventricle, so that when the next wave of blood is propelled into the flaccid vessel the shock it produces cannot be transmitted almost instantaneously throughout the arterial system, as is the case in health when the arteries are full and somewhat tense, but is necessarily tardy and progressive, so that distant arteries beat distinctly later than the heart does. When the heart's action is accelerated, less opportunity is afforded between its successive contractions for reflux of blood from the aorta, consequently the vessel is not

the region of and around the usual seat of the heart excepted. On the right side the percussion sound was dull over fully a third of it inferiorly. On this latter part stethoscopic sounds were very obscure, but became good above it. On the lowest part of the left side, posteriorly, a purring rattle was heard during inspiration, but elsewhere the breath-sound was pure. The right side of the chest expanded less freely than the left.

The feet and ankles were œdematous. The urine was in tolerable quantity, and there was some irritability of the bladder.

The tongue was raw in patches, foul in the intermediate places; it often got hard and dry, and was then painful when moved. Almost constantly in want of cold water, which he preferred to sip in small quantities at a time. Though the appetite was fair, he suffered much from flatulence in the stomach, and there was usually a sense of heat there also. Bowels regular.

He had been subjected to a variety of allopathic treatment for several months past, but had not been improving, on the contrary he had been getting worse latterly from week to week.

Farinaceous food alone recommended, and for medicine Arsenicum 3, every second day.

February 11th.—The Arsenicum was continued till the 4th instant, an occasional dose of Carbo vegetabilis and of Lachesis having been interposed. Since the 4th he has had Nux vomica 3, and Bryonia 3. From time to time favourable reports were sent from the country of his progress. He reports in person to-day. His appearance is greatly improved; there is no trace of jaundice, and his expression is cheerful and healthy. The chest sounds well on percussion everywhere but in the region of the heart; and the breath-sounds are everywhere pure and nor-

so flaccid, and the propagation of the impulse given by each new wave of blood will be facilitated, and may be almost instantaneous, as in health. I pointed out the want of synchronousness of the cardiac and radial pulses, as a sign of incompetent aortic valves, many years ago, in a paper published in the *Edinburgh Medical and Surgical Journal.* By not attending to the effect of acceleration of the heart's action on this sign, Dr. Halliday Douglas has denied the occurrence of the progressive pulse in incompetent aortic valves. See his paper on Diseases of the Heart, in the *Ed. Monthly Journal* some years back. His mistake, and the reasons of it, will be obvious to every student of diseases of the heart.

mal, no trace of effusion into the pleura or bronchial tubes remaining. Thirst and flatulence much less, as are also the languor and exhaustion. Some hoarseness, which he had formerly, continues, and an irritation in the larynx creates cough on just going to bed, but he sleeps quietly and comfortably afterwards, and in a recumbent position. Tongue still raw looking in round patches, but clean in intermediate parts. Pulse 84, and not so full.

May 14th.—Arsenicum, 6 and 12, has continued to be the principal medicine, and occasionally for a few days, Sulphur, Lachesis, and Nux vomica have been interposed. He calls today to shew himself for the third time. He is very much improved in appearance, presenting quite a hale, hearty countenance and person. His colour is good and he has gained much flesh and strength. The tongue is quite clean and natural looking. He sleeps well, five or six hours at a time. Pulse 80, full; and heart-sounds as before, but no trouble from his breathing. No œdema of the feet. He has gradually improved his regimen, and his appetite is good. But a little heat at times in the stomach, and only occasional flatulence.

During the three following years that this old gentleman lived, he required at pretty long intervals to recur to some remedies for disorder of the digestive organs; but he never again had hydrothorax, and was able almost to the last to engage actively in business and to enjoy the comforts of life. Latterly he was reported to me as suffering from some pulmonary affection, and on visiting him, while passing through the town in which he resided, I found him sinking under an attack of dry pleurisy.

When organic diseases of the heart have reached that stage in their inevitable progress, when the anatomical change in the organ, apart from all disturbance from other parts of the body, is the cause of either interrupted circulation through it, or of a propulsion of blood from its cavities with a force too great for the resistance of the ultimate vessels and tissues with which it is propelled, the question forces itself upon us—What palliative means ought we to adopt to mitigate those evils? My firm opinion is that we have no *cure,* homœopathic, allopathic, or

antipathic, for any organic disease of the heart, with the exception of uncomplicated hypertrophy, and even that demands chiefly a regiminal treatment. No doubt, mere irritability of a heart organically diseased may lead to much disorder of its action, for which no other organ of the body can be blamed, and in that case, as well as in those of disturbance originating in curable disorders of other organs, we have homœopathic means which are capable of warding off the final sufferings. But what are we to do when the sufferings arise solely from the organic alterations in the heart as a hydraulic engine? It is at this point that physiologically acting, antipathic, expedients become indispensable during the brief period that remains for treatment of any kind. To the consideration of them I may recur at some future opportunity.

NOVELTIES ABOUT THE LIVER,

By Dr. J. Rutherfurd Russell.

In the annals of the liver we might read the history of science and the progress of human thought. It was probably first attentively scrutinized by the Augurs, the most primitive anatomists, and from its colour and shape political predictions were drawn, and inspiration given to the *Moniteurs* and *Times* of those days:—and

> "When science from creation's face
> Enchantment's veil withdrew,"

so far from the "glorious visions" yielding "their place to cold material laws," it was found that the more the matter was examined the greater grew the interest, and that one discovery only made way for another; so that although during the last two hundred years about one hundred and fifty treatises have been written, many of them by the greatest men of their age—such as Malpighi, Hoffmann, Haller—upon the structure and functions of this organ, yet it was reserved for a man of our own time to announce a series of discoveries about the uses of the liver, of so new and startling a character as to attract the attention of the world at large, and which, if confirmed, will place the name of Bernard beside that of Haller. Interesting, in a general way, as these dis-

coveries are to all, they must have a special interest for us whose high prerogative it is to convert all that is true in the science of medicine into something fruitful in the great art of healing.

The liver is the largest gland in the body, even in adult life, although then very much smaller, proportionally, than in the fœtal condition; in the human species it is one third of the weight of the whole fœtus at the end of the first month, and one eighteenth at the end of the ninth month.* Its average weight in a healthy man is from three to four pounds; it measures about twelve inches in length, and six to seven inches in depth; its bulk corresponds to nearly one hundred cubic inches. This great mass is made up of a multitude of lobules, and the variation in its dimensions in different classes of animals depends much more upon the number of lobules than upon their size. Between the lobule of the liver of a mouse and of an elephant there is but a comparatively trifling difference, the enormous magnitude of the latter depends upon the enormous multitude of lobules. In some animals, as the pig, these lobules are distinct, but generally they are only discoverable by dissection. Each lobule may be looked upon as a little liver, and the anatomy of one is the anatomy of the whole. The fundamental requirements in a lobule are three-fold: 1st, Vessels to bring blood to it; 2nd, Cells to operate upon that blood; and 3rd, Vessels to carry away what has been analyzed by the cells. The analysis consists in the separation of bile, which flows off by the biliary ducts, and the formation of sugar, which passes into the venous blood and is carried on to the heart and lungs. The first set of vessels, or those which supply the liver, are the hepatic artery and the portal vein. The hepatic artery, a branch of the abdominal aorta, is the feeder of the liver; as such, it is distributed upon the coats of the ducts and capsule: after discharging its functions there its contents are collected by venous radicles and discharged into branches of the portal vein. The portal vein is formed by a union of all the veins of the intestines, except those of the kidneys and bladder. It comes direct from the

* Burdach, vol. iii, p. 483.

seat of digestion, and contains the blood in its rawest condition. Its distribution in the liver is very peculiar, and unlike that of any other vein in the body. The ordinary office of veins is to collect the blood, not to distribute it, and in their course the branches naturally diminish in number and increase in size; but the branches of the portal vein ramify like an artery, and encircle the lobules—as represented in this woodcut.

Fig. a.

Lobule of the Liver, Pig.

This represents the branches of the portal vein in the liver of a pig forming an imperfect circle round the centre of the lobule where the hepatic vein lies, but is not represented in this plate.

The cells of the liver are the seat of the vital force which operates incessantly upon the blood, inducing in it, in a wholly mysterious manner, those molecular changes which it is the appointed office of the organ to effect in the general economy of the body. These cells are very minute, varying from 1-800th to 1-2000th of an inch in diameter.* Each cell contains a nucleolus of a circular or oval form, and about 1-3000th of an inch in average diameter. Besides these nucleoli the cells contain oil globules and granules of

* Dr. Handfield Jones, Philos. Trans. 1846,-49,-53, and Med. Chirurg. Trans. *1852.*

yellow coloring matter, and are remarkable, as compared with other gland-cells, for the variety in their form and size, and their high refractive power. It has been, and still is, a disputed point, whether these little cells lie simply imbedded among the capillary vessels, or enjoy a private dwelling-place in what is called a basement membrane. Dr. Beale is decidedly in favour of the latter opinion, and represents the cells as occupying a tubular network radiating from the centre towards the circumference of the lobule like a spider's web. In the fœtus the distinction between the capillary and the tubular network is manifest, but the partition walls being of the most delicate material, what was originally an interlacement of tubes tends to become a common cavity, and it is very difficult to demonstrate this arrangement in the liver of the man. Whether such a net of fine tubes containing these secreting cells exists or not is not apparently a question of any great importance, except to the anatomist. It is enough for the physiologist that a mechanism exists by which the blood of the portal vein, loaded with the drainage of the stomach and bowels, should be exposed to the action of these resolving cells by which its division into blood and bile is effected. How it happens that the bile should percolate the walls of the capillaries and the blood flow onward, belongs to the elective affinities of the organism, which must be recognized as an ultimate fact, at which we may wonder but can never comprehend.

We have now arrived at the centre of the liver, to which the blood has been conveyed by the ramifications of the portal vein, to be exposed to the influence of the cells and decomposed. Let us trace the course of the vessels which carry out of the liver the two fluids separated from the portal blood. These vessels are the hepatic duct and the hepatic vein. The hepatic duct is a tube of a firm fibrous structure, dividing into branches which lie alongside the branches of the portal vein. In the fibrous walls of these tubes are a row of small apertures, which, on being traced, are found to lead into a corresponding number of little pouches. It has hitherto been generally believed, that these pouches were for secreting the mucus of the bile, but, as

Dr. Beale acutely remarks, a pouch with a very narrow neck would be a bad contrivance for a viscid secretion, besides, in those animals in whose livers these pouches are most numerous there is no corresponding increased viscidity of bile. It is more likely that they are diverticula or little gall bladders. This view seems highly probable when we consider the sudden and very copious secretion of bile which is observed to follow the taking of food. For example, Bidder and Schmidt (p. 166) observed, that while a dog fasting yielded 1,558 grammes of bile in an hour, the same dog, after drinking 185 grammes of water, yielded 5,165 grammes of bile in the same time. The manner in which the branches of the hepatic duct terminate has been much canvassed, and the opinion of many most distinguished investigators was in favor of the termination consisting in blind extremities; Dr. Beale, however, maintains that these ducts which carry off the bile are directly continuous with the tubes which contain the cells where the bile is secreted, and that he has succeeded in injecting the latter from the former. He has given some plates in which this is shewn.

Fig b.

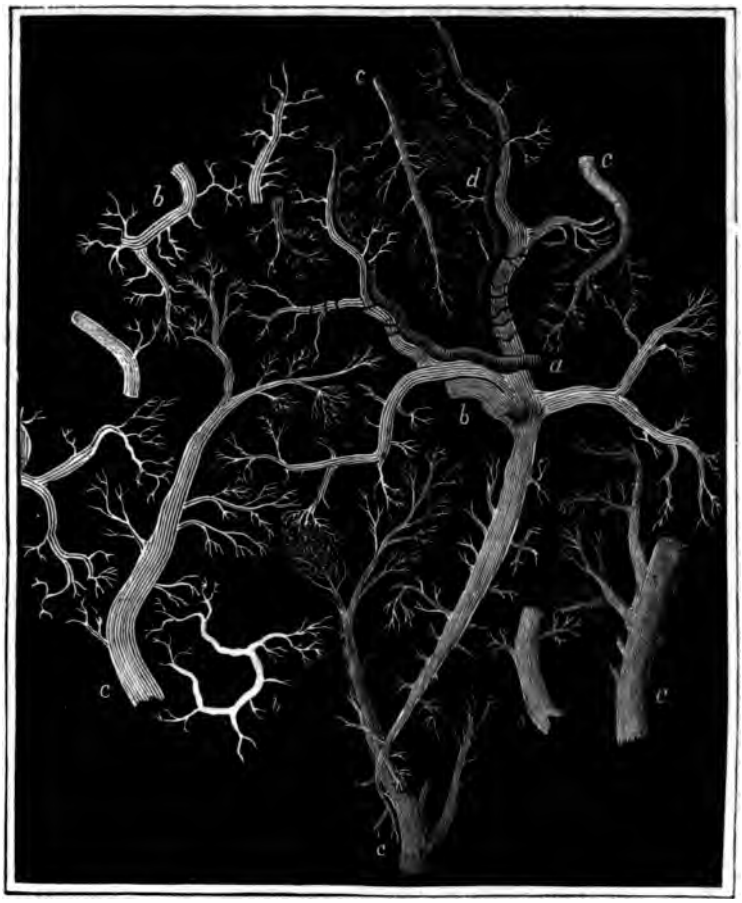
Duct of Lobule of the liver.

This represents the distribution of the duct upon the surface of a very small

lobule of a pig's liver. *a.* Duct with little sacculi in its coats. *b.* Small branches of the duct which are distributed upon the surface of the capsule: these are represented at least twice as wide as they ought to be. *c.* Inter-lobular branch of portal vein.

That the bile is formed in these cells and does flow along these biliary tubes, whether entering them by a free opening or by percolation through their walls, is a certain fact; but it is not known by what force the bile is propelled. Some have assumed it to be from the pressure of the full stomach upon the liver, but this notion is refuted by Bidder and Schmidt, who observed the contents of the gall bladder and the biliary tubes to begin to discharge rapidly in a cat some hours after a meal; their opinion is that it is by a contractile power of the tubes themselves, although they have not been able either to detect muscular fibres in them, or to succeed in making them contract by galvanism. And they attribute much importance to the descent of the diaphragm during respiration. The question, however, is by no means satisfactorily settled as yet, and demands farther investigation. The office of the gall bladder is obvious enough, being simply a reservoir of bile which is emptied into the intestines at a short interval after a meal. The bile collects in it after digestion ready for a recurring demand. In connection with the hepatic duct should be noticed a system of vessels accurately described by Weber of Leipzig, and named by him *vasa aberrantia.* They are most numerous at the transverse fissure of the liver, where they form an intricate net-work communicating with the larger branches of the biliary duct. By means of this vascular reticulation the ducts are connected with one another—they are, in fact, the anastomosing apparatus, and have been injected by Dr. Beale not only in the transverse fissure, but high up in the portal canals. They are thickly set with cœcal pouches, which are probably not mucous glands, but, like those of the duct itself, little reservoirs of bile or gall-bladders in miniature.

Fig c.



Part of surface of an injected human liver, shewing the manner in which the vessels are distributed. The duct is not represented. *a.* Artery, of which only two small branches are represented. *b.* Branches of the portal vein. *c.* Branches of the hepatic vein. *d.* Part of the capillary network of a lobule.

The distribution of the hepatic vein is the converse of that of the portal. The portal divides in its course into diminishing branches and ends in capillary vessels. In these capillaries the hepatic vein takes its origin, and the smallest of its ramifications is larger than the extremities of the portal vein: thus from the first its special office of a collector, not a distributor, is indicated. Its position is about the centre of

the lobule; into it the blood from the portal vein is poured through the capillary vessels lying in immediate contiguity with the liver cells, so that in its passage from the portal to the hepatic vein it has a full opportunity of being subjected to their influence. The branches of the hepatic vein unite and enlarge as they proceed outwards to the circumference, and in some animals, as the seal, which require to abstain long from breathing, they form sinuses capable of containing a large quantity of blood, so as to prevent the gorging of the liver on one hand, and of the heart on the other. After uniting into large branches they pour their contents into the *vena cava inferior*, the largest vein in the body, which enters the right auricle of the heart, whence it is immediately passed on to the right ventricle, and from thence to the lungs to undergo further changes. What we may call hepatic blood then is to be found only in the hepatic veins, and in a diluted condition in the vena cava inferior.

Lymphatic vessels are met with in abundance in the portal canals and the transverse fissure, and materially contribute to the capacity of the liver for receiving a large addition to its fluid contents without inconvenience. Thus, for example, a pig's liver may be easily made to contain a quantity of water equal to its own weight, which may be injected from the portal vein.—(*Beale.*)

We have now described the mechanism of the liver, which may be rudely likened to a sponge placed between the stomach and the lungs, receiving the blood from the one organ and passing it on, after certain changes, to the other. To enable it to effect these changes, however, a supply of nervous force is required, and this it derives from two sources: one the cerebro-spinal, and the other the sympathetic. In the human subject this double origin is not easily demonstrated, for the cerebro-spinal nerve, the pneumo-gastric, is lost in the solar plexus on the right side, where it becomes blended with the great sympathetic, and on the left it is distributed on the stomach. In the dog and rabbit, however, the two pneumo-gastric nerves, after penetrating the diaphragm, give off distinct twigs, which accompany

Fig. d.

Representing the cerebro-spinal axis and splanchnic nerves of a rabbit and shewing the relation of the nerves of the lungs, liver, &c. *a.* Brain. *b.* Cerebellum. *c c.* Spinal cord. *d d.* Trunk of the pneumo-gastric nerves. *e.* Upper cervical

ganglion. *f.* Common trunk of the two pneumo-gastric nerves, reunited below the lungs. *g.* Inferior cervical ganglion. *h.* Filament of connection between the superior and inferior cervical ganglia. *i.* Cardiac filament of the pneumo-gastric. *j.* Cardiac filament going from the first thoracic ganglion of the great sympathetic. *m m.* Filaments of connexion of the different ganglia of the great sympathetic with one another. *l.* Thoracic ganglion. *n.* Filament of connexion between the spinal cord and the great sympathetic. *o.* Hepatic nerves going from the great sympathetic. *p.* Renal nerves going from the great sympathetic. *q q.* Ganglia of the solar plexus. *r.* Hepatic nerves going from the pneumo-gastric. *s.* Renal nerves. *t.* Hepatic nerves united. *u.* Olfactory nerves. *v.* Optic nerves. *x.* Nerves of the third pair. *y.* Nerves of the fifth pair. 1. Heart. 2. Aorta. 3. Vena cava. 4. Portal vein. 5. Inferior vena cava below the renal veins, 6. Lungs. 7. Liver. 8. Gall bladder. 9 9. Supra-renal capsules. 10. Kidney. 11. Ureters.

the hepatic artery, and become lost in the intimate structure of the lobules.—(*Bernard*, p. 323.) We may fairly presume that they proceed as far as the capillary network and the secreting cells. It also receives branches from the diaphragmatic, which are distributed chiefly upon the walls of the hepatic vein. The explanation of the functions of the liver, both in health and disease, hinge so much upon the fact of the double supply of nerves, that we give a woodcut from Bernard's work in which it is shewn (from p. 322).*

Let us now enquire into the functions of the liver, or what changes the blood undergoes in its passage through its intricate net-work of vessels on its way from the stomach to the lungs. An obvious plan of commencing this enquiry, is to subject the two kinds of blood which we call the gastric and hepatic to a careful chemical analysis, so that the difference between them may be ascertained. This has been done by Professor Lehmann of Leipzig, whose paramount authority on questions of organic chemistry is universally acknowledged in the scientific world, and the result was communicated on the 12th of March, 1855, to the French Academy. As the matters this memoire embraces belong to science militant as distinguished from science dogmatic, it may be well to give a literal translation of the whole of Lehmann's short and satisfactory paper.

* For the whole of the facts and the wood-cuts contained in this paper we are indebted to the following interesting and important Works:

1st. On Some Points of the Anatomy of the Liver of Man and Vertebrate Animals, by Lionel S. Beale, M.B. Lond., 1856.

2nd. Leçons de Physiologie experimentale appliquée a la Médecine, faites au College de France, par M. Claude Bernard, &c., &c. Paris, 1855.

3rd. Die Verdauungssaefte und der Stoffwechsel. Eine physiologisch-chemische Untersuchung von Dr. F. Bidder und Dr. C. Schmidt, P in Dorpat. Mitau und Leipzig. 1852.

"*Comparative analysis of the blood of the vena portæ and of the blood of the hepatic veins, &c., to serve as a history of the production of the sugar in the liver, by* M. C. G. LEHMANN, *Professor of Physiological Chemistry in the University of Leipzig.*

"The results of the following analyses have been obtained from dogs and horses taken in different states of alimentation. (care has always been taken to place ligatures round the vessels to prevent a mixture of the kinds of blood under examination.) I will not delay by describing the analytical processes which will be found in my treatise on organic chemistry; and I shall likewise abstain from certain details of the composition of the blood of the portal and hepatic vein contained in my published memoire (Einige vergleichende Analysen des Blutes der Pfortader und der Lebervenen.) I shall only here insist upon the points which serve to exhibit the formation of the sugar in the liver.

"1st. *Sugar.* The blood of the vena portæ never contains the slightest trace of sugar in dogs in a fasting condition, or those fed on animal food. In the same animals fed on vegetables, (such as boiled potatoes) sugar is discernible in the portal blood, but in quantities so minute as to be incapable of measurement. In horses fed upon rye bran, chopped straw and oats, the portal blood contains slight traces of sugar. In one case I found gr. 0.055 of sugar to 100 grains of blood. In another case the serum of the portal blood of a horse contained gr. 0.052 of sugar in 100 grammes of blood.

"The blood of the hepatic veins always contain sugar in considerable quantity. In three dogs fed upon animal food, I found the following proportions of sugar to dry blood: gr. 0.814 to 100, gr. 0.799 to 100, and gr. 0.946 to 100. In other three dogs which had for two days been in a state of complete abstinence, I found in the blood of the hepatic veins the following quantities of sugar: gr. 0.764 to 100, gr. 0.638 to 100, and gr. 0.814 to 100. In two other dogs fed upon cooked potatoes, the blood of the hepatic veins contained gr. 0.981 of sugar to 100 of blood in one, and gr. 0.854 to 100

in another. In two horses fed on vegetable food (hay, straw and oats) the hepatic veins contained in one case gr. 0.635 of sugar to 100, and in the other gr. 0.893 to 100. The following table exhibits the results of the preceding analyses.

Animals.	Conditions as regards food.	QUANTITY OF SUGAR	
		In the blood of the vena portæ on its entrance into the liver.	In the blood of the hepatic veins as they leave the liver.
		grammes.	grammes.
Dog	Fasting for two days.	0.000	0.764 to 100
do.	do.	do.	0.638 ,,
do.	do.	do.	0.804 ,,
do.	Fed on Animal food.	do.	0.814 ,,
do.	do.	do.	0.799 ,,
do.	do.	do.	0.946 ,,
do.	Fed on potatoes.	A trace too small to estimate.	0.981 ,,
do.	do.	do.	0.854 ,,
Horse	Fed on hay, straw & oats.	0.055 to 100	0 893 ,,
do.	do.	0.052 to 100	0.635 ,,

"It is enough to cast the eye upon the comparative quantity of sugar contained in the blood of the vena portæ and the hepatic vein, to see that the opinion of the formation of sugar in the liver which M. Bernard was the first to announce, is put beyond a doubt.

"2nd. *Fibrine Albumen.* The blood of the vena portæ in horses and dogs contains fibrine which does not sensibly differ either in kind or quantity from the fibrine of other veins. The blood of the hepatic vein if carefully collected without admixture of other blood, contains no fibrine. The few flocculi which are sometimes obtained by beating up the hepatic blood of the horse, are almost entirely composed of white globules, which are very abundant in the blood of the hepatic veins as compared to that of the portal vein. The blood of the hepatic veins of the dog exhibit the same character as regards fibrine, that is to say, this substance almost entirely disappears in the liver.

"Very careful comparative analysis of the blood of the portal and hepatic veins, have convinced me that a remark-

able quantity of albumen also disappears in the liver, and that this quantity is relatively greater in dogs than in horses, upon the incontestable fact of the disappearance of the fibrine in the liver. I have established the opinion already expressed in my first memoire, that the sugar formed in the liver is derived from the fibrine.

"3rd. *Fat and Blood globules.* The blood of the vena portæ always contains much more fat than that of the hepatic veins. The serum of the portal blood in dogs fed upon animal food, is generally much richer in fat than that of horses; notwithstanding this, no more fat is found in the serum of the hepatic blood of dogs than of horses. In horses the blood-globules of the portal vein are much richer in water, and especially in iron, and on the other hand much poorer in globuline, extractive matters, and salts, than those of the hepatic veins. In dogs as well as horses the blood of the hepatic veins is much richer in blood-globules and extractive matter, than that of the portal vein. I have observed in dogs as well as horses, that a considerable quantity of iron always disappeared from the blood in its passage through the liver. But the difference in the quantity of iron found in the blood at its entrance into, compared with the quantity at its exit from the liver, is greater in dogs than in horses. It results from this that a portion of the hematine of the blood disappears in the liver, and probably goes to the formation of the colouring matter of the bile, which would prove again the complete analogy between bilifulvine and hematoïdine, as one of my pupils is about to demonstrate.

"*Comparative analysis of the blood of different veins with arterial blood (all the comparisons have been made from blood taken from the same horse).* The blood which leaves the liver by the hepatic veins, always contains incomparably the most sugar of any in the body. This blood mixes with that of the *vena cava inferior* to mount to the heart. I can here but confirm the statement long ago made by M. Cl. Bernard, that the blood of the *vena cava inferior* is that always contains the greatest amount of sugar after the ins. I found in the solid residue of the blood of

the vena cava of a horse, sugar to the amount gr. 0.346 to 100, gr. 0.211 to 100, and gr. 0.492 to 100 of blood. After the blood has passed through the lungs and become arterial, no sugar is to be detected as a general rule. I have never found any in the arterial blood of horses, although they had been fed upon starch and oatmeal. In that of dogs and rabbits, sugar could be detected in arterial blood, if the venous blood contained more than 0.3 per cent of it. This is the case in all the conditions in which sugar is passed with the urine; for example, in those instances after M. Bernard's operation, after the injection of large quantities of sugar into the veins or into the stomach, or finally in the instances of rabbits which had eaten largely of carrots and beet root. But in all these instances it is always the hepatic vein which contains most, then the *vena cava*, &c.

"The blood of the small veins, such as the cephalic, digital, temporal, and external abdominal of the horse, contains always a smaller quantity of blood-globules and more serum, and therefore more water than arterial blood. But the blood of the larger veins, especially the vena cava inferior, contains blood of the same or even greater concentration than the arterial. All my experiments go to prove that a remarkable quantity of blood-globules disappears in the general capillaries of the body. The equal or superior density of the blood of the *vena cava inferior* as compared with the arterial blood, is not due altogether to the expulsion of water by the urinary secretion, but is chiefly owing to the influx of the blood from the hepatic vein. This was shewn in a striking way by the analysis of the blood of a horse which had not drunk for 24 hours before it was killed. The comparison of all these analyses goes to prove that two functions proceed simultaneously in the liver,—the formation of sugar, of blood-globules, and of bile, as M. Bernard has long ago established. The blood of the smaller veins contains more fibrine than the arterial blood, and than that of the vena cava and the jugular vein. In the vena cava I found only one-half the quantity of fibrine that I found in arterial blood. The arterial blood always contains more mineral salts than the venous blood."

This Leipzig manifesto embraces and exhausts all the chemical elements of the question. It demonstrates the fact that the blood comes to the liver rich in fibrine, albumen and fat, wholly devoid of sugar, and comparatively poor in blood-globules; that the blood which leaves the liver always contains a quantity of sugar, and is rich in blood-globules but not in fat, while the bile is full of fat; hence the inevitable inference that in the liver cells the blood coming from the seat of digestion is decomposed, the fibrine certainly, and probably also some of the albumen transmuted into sugar and passed onwards by the hepatic vein towards the lungs, and the fat and some other ingredients separated and expelled in the form of bile. This transmutation of fibrine into sugar is utterly opposed to the theories of Liebig, which have met with so general an acceptance hitherto, that no such power existed in the animal economy, but that all the chemical principles of the nature of sugar were only absorbed, and never generated by the purely vital forces. It would be out of place to follow up to its possible consequences this important revolutionary doctrine promulgated by Bernard, and established by Lehmann and other chemists. We have enough at present on hand in stating merely the bare facts, and before passing to the consideration of the conditions which regulate the manufacture of sugar, and the uses this sugar subserves in the economy, it will be well to say a few words about its chemical character.

There are many kinds of sugar met with in both the vegetable and animal kingdoms, but for practical purposes they may all be divided into two classes according to the action of acids and alkalis upon them. The first-class sugar, or *cane sugar*, is found in the sugar cane, beet root, the maple and many other vegetables. Its chemical equivalent is C_{12}, H_9, O_9, + ^2HO. When brought into contact with the lining membrane of a calf's stomach, or with caseine, it is transformed into lactic acid. When boiled with diluted sulphuric acid this cane sugar is converted into sugar of the second class, known as *grape sugar* or *glucose*. This is the sugar found in the liver and hepatic veins. It differs from

cane sugar in being readily acted on by alkalis, while cane sugar is not, and not being affected at all by weak acids, which decompose cane sugar rapidly. Alkalis convert it into a brown matter, and strong sulphuric acid dissolves without charring it, and forms sulphosaccharic acid. "Notwithstanding the fact," says Professor Gregory,* "that cane sugar is easily converted into grape sugar, and that the formulæ differ only by three equivalents of water, it is evident that these two kinds of sugar differ more than if they were merely different hydrates of the same compound. Strong mineral acids instantly decompose cane sugar, but have little action on grape sugar; while alkalis which combine with cane sugar to form crystalline compounds, rapidly convert grape sugar into dark compounds, glucic, and melassic acids. And though both sugars agree in undergoing the same (vinous) fermentation, yet it is most probable that cane sugar before fermenting becomes grape sugar." The most certain test by which the presence of sugar can be established, is its fermentation; when mixed with yeast or diastase, it is transformed into alcohol, which may be obtained pure by the distillation of the residue, and carbonic acid which may be collected and tested as it escapes. In all instances where Cl. Bernard affirms the existence of sugar anywhere, he had ascertained it by this infallible experiment, which he performed by a simple apparatus consisting of a tube into which the substance to be tested was put in contact with yeast, while a smaller tube was passed down to the bottom of the first, and curved over it at the other extremity, where it passed through a firmly fitted cork. Thus when fermentation took place, the liquid was forced up through the small tube, and its alcoholic character determined, and the gas remaining behind was also examined. As some of the objections to M. Bernard's experiments take a chemical direction, and deny the sufficiency of his analyses, it is [illegible] to put this to rest by [illegible] that the sugar [illegible] exist was not known on [illegible] its property of ferment[illegible]

* Outli[illegible]

M. Bernard examined the livers of mammalia, birds, reptiles, osseous and cartilaginous fishes, and molluscous animals, and in all he found sugar. The quantity is seldom greater in health than 4 parts of sugar to 100 of fresh liver, and the average is between 1 and 2 per cent. The opportunities of investigating this subject in man are very rare, for it is only found in the bodies of those who die in a state of health, and soon after death. These conditions are seldom to be met with in ordinary circumstances except in criminals who have been executed. All the experiments that have been made are here represented.

Date of observation.	Age.	Alimentation.	Weight of the liver.	Quantity of sugar per cent.	Total quantity in liver.
			Kilog.	grammes.	grammes.
1. 22nd May, 1850	43	Fasting	1.300	1.79	23.27
2. 1st Feb. 1851	45	Fasting	1.330	ascertained	not calculated
3. " 1851	"	Fasting	1.175	not weighed	not weighed
4. " 1851	22	Mixed	1.200	2.162	25.704
5. " . 1851	"	do.	1.175	ascertained	

In a sixth instance, that of a man killed by a musket shot, although in consequence of the examination not being made till two days after death, the liver was in a state of incipient putrefaction, yet it contained gr. 1.10 to 100 parts, and the total calculated to exist in the whole liver, was 17.10 grammes. If these results stood alone it might give rise to the suspicion that the presence of sugar in the liver of a person dying by violence was an attendant upon the mode of death, and did not represent the natural contents of that organ. But when we take into consideration that in all the animal kingdom the liver is found to contain sugar, and that it disappears very readily under the influence of very many [illegible] conditions, the [illegible] and fair inference is, that man [illegible] general rule, but that what is [illegible] of examining the body [illegible] and as when this excep- [illegible] what our previous

knowledge of the liver of animals led us to expect, the exception in this case certainly confirms the rule.

That the character of food has not much influence upon the quantity of sugar contained in the liver, is shewn by the following table.

	Percentage of sugar in liver.
1st Dog fed on animal food . . .	1.90
2nd do. do. . . .	1.40
1st Dog fed on animal food and bread . .	1.70
2nd do. do. . . .	1.30
3rd do. do.	1.30
1st Dog fed exclusively on fæcula and sugar .	1.88
2nd do. for 6 days exclusively on sugar .	1.50

In all these examples the dogs were killed at the s
period of their digestion, and the experiments show tha
nature of the food made only a fractional if any differe
the quantity of sugar. That a sugar diet had ha
creased the sugar in the liver, and that a purely
did not diminish it. In carnivorous animals the
difference in the quantity of sugar which p
blood at different times. When digestion is
the quantity delivered by the hepatic veins
cent, which when this blood is further dilut
auricle is much diminished proportion, a
appears after the blood through the l
a full meal the liver like a sponge,
greatly increased, so re is a great a
the quantity of sugar s, not all secre
perhaps, and when a arrives at
not all destroyed th passes in
capillaries, and is fou

If the early appear
universal distribution
proof of its importance.
tion in the liver must
and such being the ca

on with unimpaired vigour when the whole substance of that organ presented the characters of the well-known *foie gras*.* Even the existence of cysts, hydatids, and cancer in the liver does not prevent the formation of sugar in those parts which are not the immediate seat of the disease. Endowed apparently with remarkable general sympathies in respect to other organs, especially the lungs and spinal cord, it seems to have little internal relationship with itself. This may be accounted for by its anatomical structure; and it may, perhaps, be looked upon rather as a congeries of little formations depending on central influences, like a group of island dependencies upon an empire, than as one large independent organ. Be the explanation what it may, the facts that a liver greatly diseased may yet continue to produce sugar, and that this important operation is instantly suspended whenever fever invades the frame, are of paramount practical interest.

We have already given a tabular view of the comparative effect of different kinds of diet upon the formation of sugar. This, however, was rather to establish the fact, that the sugar which was found was not contained in the aliment. The influence of various articles of food upon the glycogenic function of the liver has been more fully examined, and yielded interesting results. In the first place, Bernard found that fat is incapable of conversion into sugar. Dogs fed on fat soon lost all their sugar; so that, in a certain superficial way, the dietary of Rollo for diabetic patients is justified by these experiments. No doubt feeding a person on fat will prevent the formation of sugar at the liver, and consequently cause its disappearance in the urine; but as diabetic urine is merely a symptom of some profound lesion of the nervous system, probably the so-called cure is [illegible] is the disappearance of the sugar in a [illegible] with acute disease. In neither case do [illegible] symptom indicate th[illegible]istence of [illegible] The fog that preven[illegible]ger-signal [illegible]

* Lereboullet sur le Foie [illegible] p. 477.

does not contribute to the safety of the line, nor does the suppression of indications of danger by allopathic expedients secure the safety of the patient. In the second place, he found that pure gelatine and albumen, so far from reducing the quantity of sugar below its average amount, had rather the opposite effect. This, however, although at first it excited his surprise, is what we should now expect to have been the result. But the experiments with the remaining one of the three primitive elements of diet, the sugar and starch group, gave most unexpected results. He found that, although at first dogs did not like an exclusively starch and sugar diet, yet after a few days they got used to it, and it seemed to nourish them; and on examining the liver, there was no excess of sugar found there, but almost exactly the same quantity as when the dogs had been fed exclusively on albumen. One of the dogs was fed for three days with potatoes and starch, and killed three hours after the last meal. In the liver the proportion of sugar was 1.88 to 100 parts; but the liquid obtained from the liver, instead of being clear, as is usually the case, was of an emulsive and opalescent appearance. The sugar had been absorbed from the stomach and intestines, and had been carried by the vena portæ to the liver, but it had not there been converted into the true diabetic or grape sugar, and continued to mix with the blood in a sort of transition state between cane and grape sugar; no more than the average quantity of hepatic sugar being formed out of this exclusively sugar diet. This [illegible]strates the futility of the attempts made to cure diabetes [illegible]holding feculent food. Whether animals live on [illegible]umen makes little difference in the amount of [illegible] by the hepatic veins into the vena cava, but [illegible] an immense influence, and chiefly the

[illegible]ervous influence upon the liver has [illegible]r. Bernard, by a series of experi- [illegible] for ingenuity of design than for [illegible]ir execution. The liver, as we [illegible] by the pneumogastric nerves.

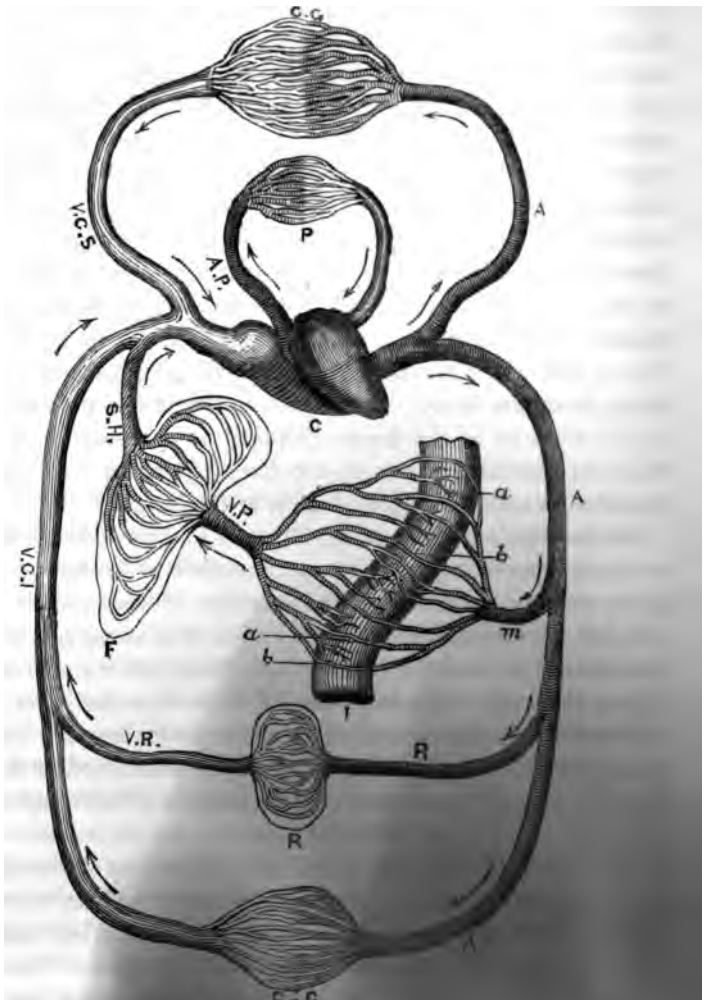
These nerves have their origin in the medulla oblongata, behind the olivary and very near the restiform bodies, by one or two rows of filaments from five to six lines in length, and disposed in regular order. After leaving the skull they accompany the internal jugular vein; on entering the thorax there is a difference in the distribution of the right and left pneumogastric nerve. However, they are both lost in a plexus of nerves situated upon the stomach. From this plexus the liver derives its nerves. Before descending to the organs of the abdomen however, it gives off large branches, which supply the lungs. In the rabbit this nerve gives off a distinct branch after supplying the lungs, which goes to the liver; so that in that animal there is a double nervous distribution, the one direct from the main trunk of the vagus, the other from the plexus of the stomach.

When the pneumogastric nerves are cut in the neck, and the animal is killed on the day after the operation, no sugar is found in the liver. The first explanation of this effect that offers itself is naturally that the nerves so divided were the channels by which a vital force was conveyed, which the liver required to enable it to convert the fibrine of the blood into sugar. In that case substituting a current of galvanism might have the same effect. This was accordingly done, and Bernard found that when the galvanic stream was directed downwards to the liver it had no influence, but if sent upwards towards the origin of these nerves it restored in an exaggerated degree the glycogenic action of the liver. The following explanation of this was proposed. The pneumogastric nerve is a mixt or compound nerve; on the one hand it transmits an influence from the centre [illegible] giving rise to muscular contraction in the [illegible] and to secretions in the stom[illegible] while on the [illegible] inwards impressions [illegible] in outlying [illegible] mits them first to th[illegible] and where the [illegible] ceived and give rise t[illegible] from whence [illegible] be at once forwarded, wi[illegible] like [illegible] message, on to some other [illegible] The [illegible]

in this instance which are thus united are the lungs and the liver. Before the liver will act it must receive a message from the lungs; but if the pneumogastric nerves are divided in the neck then the lungs are cut off from the centre, their call for aid is not taken up to the brain, and therefore cannot be sent down to the liver. In order to test the correctness of this explanation, Bernard performed a crucial experiment. He divided the branch of the pneumogastric in the rabbit which comes off from the main trunk at a point below the origin of the pulmonary branches. The place will be seen at once in the diagram (p. 61); it is marked *r*. By doing this he left intact the circle from the lungs to the liver by way of the spinal cord, but he cut off the direct influence of the brain from the liver. The result was that the formation of sugar went on at the liver. Thus it is an ascertained fact that the stimulus given to the liver by which this special function is called into play begins at the lungs.

Before this experiment, M. Bernard had instituted a series of most interesting ones upon the effect of irritating by a sharp-pointed instrument the portion of the spinal cord whence the pneumogastric nerves arise. The exact spot where the wound is made is limited by a line drawn transversely above from one of the tubercles of Wenzel to the other, and below from the two sets of the pneumogastric nerves. After the operation "the rabbit looks a little astonished at first," (*semble etre un peu étonné sur le moment*), but it soon recovers its senses, and it does not seem to be the worse. The effect of this irritation or wound of this portion of the spinal cord is, that in the course of an hour or so the urine is [illegible]. We are now prepared for this effect; but when it [illegible] announced it had a most startling effect. The ex- [illegible] of the effects of the operation is simply that an [illegible] excitement was produced at the centre, simu- [illegible] stimulus which goes from the lungs to [illegible] centre, and that in consequence the [illegible] quantity of sugar into the hepatic [illegible] lungs could use up, and the

Fig 5.



This Diagram illustrates the whole p

The source of the sacc
the substance of which it
to make sugar from the blo
contains no sugar in carniv
of the mesenteric arteries,
vena portæ at *b*, and some of
at *a* from the intestine at I.
into the liver, diffuses itself th

the elements of the gland, becomes full of sugar, and then passes into the hepatic vein (H. S.). We have thus the blood entering the liver at V. P. (the portal vein) without containing a particle of sugar, and full of it at H. S., where it leaves the liver. This sugar then must have been generated at the liver. The sugared blood of the hepatic vein (H. S.) then arrives at the vena cava inferior (V. C. I.) near the heart, mingles with the non-sugared blood of the vena cava, and enters with it into the heart (C.), where it again mixes with the blood of the vena cava superior (V. C. S.); so that the quantity of sugar is diluted from being in the proportion of 0·980 to 100 at H. S. to 0·300 to 100 at the heart (C.). The sugared blood of the right ventricle (C.) is driven through the lungs by the pulmonary artery (A. P.), it arrives at the capillaries of the lungs (P.), where the sugar is almost entirely destroyed, the blood returns to the left side of the heart by the pulmonary vein. Thence the blood, having thus lost all its sugar, passes by the arterial or aortic system (A. A.) on to the general capillaries of the body (C. G.). There the blood undergoes further changes, and becomes converted into venous blood, to return by the vena cava superior and inferior (V. C. S., V. C. I.). The blood of the mesenteric artery (*m.*) expands in capillaries upon the intestines, and absorbs from the intestine the matters there dissolved at I., and then goes on to the liver. The blood of the renal artery (R.) arrives at the kidney (R.), and yields the products which form urine, but has no sugar to give in its normal condition. This only happens when the quantity of sugar contained in the right side of the heart is more than 0·300 to 100, for this is all that the lungs can destroy. When more than this the excess passes into the arterial circulation, and the renal arteries carrying sugared blood deliver the same to the kidneys. The kidneys then become eliminators of sugar, and the individual diabetic.

excess was passed on with the arteries of the body; from one of these arteries (the renal) the kidney separated it, along with the water in which it was held in solution, and hence the diabetic urine. That such is the true explanation of the phenomenon of artificial diabetes is certain; and it is highly probable that when this disease is met with it depends upon some diseased state of that part of the brain from which the pneumogastric nerves take their origin, and it is therefore not likely to be cured by feeding patients on bread made of gluten, or by means which tend to affect the symptom, not the cause.

It is now an established fact that there is a constant for-
[illegible] of sugar at the liver, and an equivalent destruction
[illegible] sugar at the lung[illegible], in health, and that this subterra-
[illegible] is only [illegible]nifest either when the liver yields
[illegible] lungs [illegible]me too little. The questions that
[illegible] what becomes of the sugar, and
[illegible] the economy. The first sup-
[illegible] very combustible material,
[illegible] lungs, and was emitted
[illegible] and some experiments
[illegible]. It was found that

animals became diabetic on the administration of ether and chloroform, which was ascribed to the inability of the air loaded with these vapours to consume the sugar, which accordingly passed into the general circulation. However, Bernard demonstrated the fallacy of this theory, which at first he felt inclined to adopt, by exposing blood which contained sugar to the action of various gases. He divided a quantity of blood taken from the jugular vein of a dog in a state of digestion, and consequently sugared, into three equal portions; one he mixed with oxygen, one with nitrogen, and one with carbonic acid gas. The sugar disappeared in the portion mixed with nitrogen, but was unaffected by the oxygen and carbonic acid. We cannot detail his other experiments, but they were quite enough to satisfy him that the disappearance of the sugar was not owing to a conversion into carbonic acid at the lungs. Neither was it owing to the action of the alkalis of the blood. It is true that the blood always is alkaline, and that an acid, or even neutral, condition of the blood is incompatible with life; but it was chemically demonstrated by Lehmann that the amount of alkali in the blood was not enough to destroy the sugar. The explanation proposed and accepted by M. Bernard is, that the disappearance of the sugar at the lungs is owing to its transformation into lactic acid by a species of fermentation. The chemical constitution of the two is isomeric. Sugar being represented by C_{12}, H_{12}, O_{12}, and lactic acid by C_{12}, H_{10}, O_{10}, $+{}^{2}HO$, or an atom of water; and this precise transformation may be imitated in the laboratory by mixing sugar and yeast, prepared in a particular way, when instead of converting the sugar into alcohol and carbonic acid, it changes it into tartaric acid and water.

Up to this point we have advanced step by step upon a series of facts, or what we must accept as facts until they have been disproved by counter-experiments and observations; but we now enter the region of conjecture, and although we may admit that M. Bernard's suggestion of the purpose the sugar he unquestionably discovered to be form at the liver serves in the animal economy is ext

nious, perhaps perfectly true, yet it would be unjust to him as well as to science to place it on the same level as his great discoveries. The explanation he offers is this. If we take yeast and pass it through a filter, the filtered liquid will contain albuminous matter; now if we divide this fluid into two parts, and to one add sugar, and to the other nothing, in the course of a certain time the sweetened liquid gets turbid, and minute egg-shaped bodies appear in it, which gradually enlarge and give off similar bodies like themselves, until at length a sort of chaplet is formed, more or less simple, or branched, as may be. No such change takes place in the other portion. We have here the most primitive development of the vegetable kingdom in the form of this fungus, which appears when sugar and dissolved yeast granules are left in contact at a sufficient temperature. If instead of yeast we take a little serum of the blood, and divide it into two portions, exposing both to a sufficient temperature, but to one only adding sugar, we shall find that, in the course of four or five days, the unsugared portion has putrified, but the sugared has had formed in it a quantity of cellules, not like the little cells that appeared in the yeast, but having a close resemblance to the white blood-globules. Here then is a sort of animal germination in the presence of sugar. Now, if we follow up this hint, we find that throughout the vegetable kingdom the phenomenon of germination is invariably attended by sugar; and if we examine the animals in the fœtal state, we find that in all the muscular tissues and in the lungs there is a large quantity of lactic acid when soaked in water; but when treated with alcohol, instead of lactic acid we meet with glucose. The object that the sugar always present is supposed to serve is to present to the tissues during their formation the materials of their growth in a sort of nascent condition. Sugar, as we know, is a very unstable compound; it is very readily decomposed; it is in a state of constant fermentation, as the word is popularly used; if a substance is brought in contact with it, de- and re- tion is quickened. Thus it promotes life by a sort of ction, imparting to what it approaches the mole-

cular restlessness of its own nature. In this way it is supposed to promote the formation of blood globules in the liver, and serves as the nursery of the body.

While the genius of Bernard has thus disclosed the wonderful action of the liver in forming sugar, the labours of Professors Bidder and Schmidt have been directed to ascertain the history of the complementary function of that organ in the elaboration of bile. The sugar and the bile have this in common, that while the whole of the former is disposed of in the vital processes without appearing at the surface, except in morbid conditions of the system, so the bile too is partially used up in the same way, while the remainder is cast out as refuse. In order to determine the exact quantity of bile secreted, and what became of it after it was poured into its proper channels, it was necessary first to institute a series of experiments to collect the bile as it was made in the liver, and this was done by introducing a tube into the bile duct of various animals, measuring and analyzing it, and comparing the conditions of the animals when deprived of their bile with their natural state. They found that when the tube which gave them the command of the bile was successfully introduced, it did not materially affect the health of the subject of the experiment; and although the experiments in some respects have been considered fallacious, yet enough of undisputed conclusions remain to make the results highly valuable.

The bile is a clear fluid varying in colour from golden yellow to grass-green. These varieties depend upon the nature of the food and the action of the substances it is in contact with. The yellow bile is the result of animal and the green of vegetable food, but the clearest yellow becomes green very soon when exposed to the action of the atmosphere, and when retained for many hours in the gall-bladder, but the bile of the gall-bladder taken two and a half to three hours after a meal is as yellow as that taken directly from the liver. We may thus ascertain whether ejected bile has been long or recently secreted by the colour it presents, if we know what the person has been eating. When first

secreted the bile is always neutral, and it derives any alkaline character it may afterwards acquire from the mixture of mucus from the gall-bladder.

As to the quantity of bile secreted in a given time, for example, in twenty-four hours, this is only approximately ascertained by comparing the amount of different periods after food is taken. The following table shews the fluctuation it underwent in a cat.

One kilogramme of cat afforded in one hour:

Hours after the last meal .	2½-3	12-16	24	48	72	168	240
Of fresh bile (grammes) ..	0·600	0·807	0·410	0·291	0·179	0·153	0·094
Of dry residue " ..	0·033	0·045	0·025	0·020	0·018	0·011	0·007

From this table, which is only one of many that give the same result, it will be seen that immediately upon taking food there is an increase in the flow of bile, before digestion can have taken place to such a degree as to have at all enriched the blood with chyle, and consequently simply from the greater quantity of blood which the stimulus of food retains in the organs where it is first received; that this increase gradually augments and reaches its maximum from twelve to fifteen hours after a full meal, by which time, probably, all the products of the digestion have been received into the blood. At this point a diminution begins in the amount of bile secreted, so that in twenty-four hours after the meal the quantity is far less than two hours after. From these data we may strike an average of the daily secretion of bile in the cat with tolerable exactness; and this gives 0·608 grammes of fluid bile, and 0·034 grammes of dry to a kilogramme of cat. A dog yields $^1/_{50}$th of its weight in the day, and a rabbit no less than $^1/_8$th of its weight. It is most probable that a man yields about the same proportion as a dog: this would give about 60 ounces to a man of ten stone. We may observe in passing that there is a partial but not complete coincidence in the increase of sugar and bile delivered by the liver. The sugar at once attains its highest amount after a meal is taken, but although even

then the quantity of bile secreted is much above its average, yet it does not attain its maximum till long after the sugar has begun to diminish. Let us now consider what becomes of all this bile that is poured into the intestines. Does it pass off by the alvine channel or by the kidneys? An analysis of the solid constituents of bile disproves the latter supposition: they are not found in the urine. But they are in the fæces, but not nearly the whole quantity. In order to ascertain this, the quantity of solid matter yielded daily by a dog fed on animal food was accurately determined, and then the fæces were subjected to a careful analysis. The result is shewn in the following table:

Water	56·4 grammes.	
Solid residue .	40·9 „	
Of these neutral fat soluble in ether	2·82 grms.	
„ Fat with traces of bile....	4·97 „	
„ Bile products soluble in alcohol.....	3·80 „	
In this organic matter.....	3·42	with 0·70 sulph.
„ inorganic „	0·38	

Extracted by muriatic acid and boiling alcohol:—

Not derived from the bile....	9·60 grm.	with 0·084 sulph.
Fat, oils, acids, and ox. of iron	6·35 „	
Hair, sand, &c.	13·36 „	
	40·90	

From this it is proved with absolute certainty that the larger part of the bile discharged into the intestines is there absorbed into the blood, for only a small portion of the 40 grammes of solid residue of the fæces was derived from the bile, while the quantity of solid matter delivered in the same period was nearly equal to the whole of the fæcal residue, being 39 grammes, while the other is only 40. The fact is brought out by attending to the Sulphur. In the 39 grammes of solid bile discharged by the liver in the five

days into the intestines, there must have been 2·37 grammes of Sulphur: now the whole quantity of Sulphur contained in the fæces was only 0·384 grm., and more than half of this was derived from the hair, &c., so that almost all the Sulphur which is contained in the bile is absorbed by the blood again, and about $\frac{7}{8}$ths of the whole of the solid contents of the bile. As the bile then does not obtain an exit by the alvine or urinary channel, there remains but the third part of the system to be examined, and that is the lungs. Bile consists chiefly of a feeble acid called bilic, or cholaic combined with soda. The composition of this acid is thus atomically represented: C_{44}, H_{36}, NO_{13}, = C_{41}, H_{25}, NO_{12}, HO. (Gregory). We see from this what a large proportion of carbon there is in bile, and we know that carbon is being constantly emitted from the lungs in the form of carbonic acid; hence the conclusion is irresistible, that the expired air must carry off a portion of the secreted bile. Some chemists have gone so far as to declare that all the carbon discharged from the system passed through the liver, but this undoubtedly is not the case; for a dog fed on animal food yields at the rate of 8·6 grammes of carbon for every kilogramme of its weight in the air it expires, while during the same period the liver does not discharge above 1 gramme of bile into the intestines, and out of this not above 0·5 grm. of carbon are absorbed by the blood. So that about six per cent. only of the carbon which is given off by the lungs as carbonic acid comes from the liver.

Let us now consider the uses of the bile in the animal economy; a subject only imperfectly known as yet, notwithstanding all the labour and skill which have been brought to bear upon it. From the following description of the effects of depriving a dog of its bile we may gather much information; it is given by Bidder and Schmidt, and is a fair specimen of what was generally met with by them in the whole series of their experiments. Thus after an opening had been made in the side of the dog, and a tube inserted into the hepatic duct, which received every drop of bile furnished by the liver, and carried it outside, where it was of course of

no use to the dog: for the first two days the animal refused its food and seemed much indisposed; but from the third day it ate greedily of flesh to the amount of 160 and even 400 grammes a day. The weight of the dog at the beginning of the experiment was 6 kilogrammes, and at the end of a month it weighed only 3·10 kilogrammes. In thirty-four days it had lost two-fifths of its weight, notwithstanding the large quantity of flesh it had consumed. The emaciation proceeded gradually from the first, and consisted chiefly in the disappearance of all the fat of the body, so that the muscles of the body looked like long ribbons seen under the skin, which hung in loose folds over the skeleton. The muscles too wasted away, and there was great feebleness of movement from the first. The hair came out in handfuls and left bare patches. During the whole of this miserable spectacle the digestion seemed to go on with perfect regularity. The alvine evacuations were infrequent, at first slimy and white with gray and green portions, but latterly of the normal colour and consistence; but during the whole period they had a strong asafœtida smell, owing to the putrefaction of the food in the intestines. Although the breath was also most fœtid and disagreeable during the whole of the experiment, there seemed to be no tendency to dissolution of the fluids, as there was neither ecchymosis nor hæmorrhage. The urine was small in quantity, but of high specific gravity. Notwithstanding the extreme emaciation the dog retained its animation to the last, and although it could hardly stand it rose when we (*i.e.* Bidder and Schmidt) entered the laboratory of a morning and followed us to the balance. There was no disturbance either of the respiration or of the heart's action, but a most marked decrease of animal heat: a thermometer inserted into the rectum indicated 34·6 C. degrees, and fell even so low as 29 C. The death of the animal was without a struggle. On dissection the body disclosed no abnormal appearance of importance, except the almost absolute absence of fat and thinness of the muscles. The naked eye could not detect an atom of fat in the cellular tissue under the skin, and it had entirely

disappeared from the kidneys. It would seem from this that this dog, although largely fed with its appropriate food, was simply starved to death, because, although it could digest, it could not assimilate its meat when deprived of its bile. Besides being starved it was made cold by cutting off some of the charcoal which should have been burned at the lungs. Let us now endeavour to ascertain how it was starved by its bile being cut off, in other words to the assimilation of what portion of the aliment bile is essential. Taking the usual division of food into the albuminous, the feculent, and the oily, Bidder and Schmidt made the following experiment to determine the action of the bile on each species. They gave a dog, which they had absolutely deprived of bile, 3·035 kilogrammes of liver and lungs, from the 29th of March to the 2nd of April. This quantity of flesh contained 806·8 grm. of solids, of which 693·2 grm. were albuminous and salts, 113·6 grm. were fat. The alvine evacuations of this dog during that period yielded 124 grm. of solids, of which 72·2 grm. were fat, and only 51·8 grm. were albuminous matter and salts. The difference between 693·2 and 51·8 represents the quantity of albumen digested by the dog in these five days without the aid of bile. From this and similar experiments we may conclude that it is not in virtue of its action on the albumen of the food that bile is required for its assimilation.

Another dog was fed for eight days upon black bread. The alvine evacuation was very voluminous and had an acid reaction; on being tested with iodine to determine whether starch was present, only a few blue spots appeared here and there, and not more than was observed in similar circumstances in a dog in its normal condition. The dog increased in weight, and the same observation was made in an experiment with another dog fed upon white bread after its bile had been withdrawn. In this, for instance, in eight days the dog increased in weight from 5·325 to 5·590 kilgrm. The inference drawn from this seems undeniable, that feculent food can be perfectly digested without the assistance of

bile, and that it therefore takes no part in the assimilation of this portion of the aliment.

The influence of the bile upon the fat alone remains for consideration, and that fat too can be assimilated without it, is proved by the experiment first detailed. This dog, whose weight was 5300 grammes, received in the first series of observations 95 grammes of fat in eight days, and in the second, 41.4 grammes in five days, while there were found 85 grammes of fat in the alvine evacuations in the first experiment, and 72 grammes in the second. So that in one case the dog assimilated 11.88 grammes of fat daily, and in the latter 2.24 grammes. Similar results were obtained by Lenz, who made many experiments on this subjects, which are published in his thesis.* Although there can be no doubt from these experiments that *some* fat may be absorbed into the system without the action of the bile, yet it would seem that the quantity is far less than when this secretion is present. For a dog not much larger than the one previously employed, absorbed no less than 446.9 grammes of fat in five days, which is about seven times as much as was possible for the dog to do when deprived of its bile. That bile enables fat to be received into the animal economy seems to be an established fact; but the method of its operation in this process is still a matter of uncertainty. It evidently influences the absorption of fat by the lacteals, for while the average of fat in the chyle is 32 per mille, it was only 2 per mille in animals deprived of their bile. If the fat were acid the soda of the bile might neutralize it, and it does when this is the case: but the fat for the most part is neutral, so it is not in this way it acts. Nor does it act by making a sort of emulsion with oil globules as has been supposed, for such an emulsion would not be more easily absorbed than fat in a state of minute division. Its true mode of action, according to Bidder and Schmidt, is by moistening the epithelial cells of the mucous membrane of the intestine, and so disposing

* De adipis concoctione et absorptione diss. inaug. Dorpati, 1850.

them to permit the permeation of the oil globules: without this the fat is not absorbed. Its action is thus purely mechanical, and affects the molecular attraction of the interstices through which the oil passes, and may be imitated by moistening a capillary tube with bile, and dipping one end in oil, while a dry tube of the same diameter is similarly placed; the oil rises higher in the tube moistened with bile than in the other. Thus it would seem that an animal actually dies of starvation, because it cannot absorb fat without the aid of the bile; and one of the chief offices of the bile is to lubricate the passages by which the fat passes into the blood!

The inordinate appetite observed in dogs deprived of the use of their bile, arises from an instinctive perception of the large quantity of food that is required to compensate the want of fat which should have been absorbed. Hunger is one of the constant effects of a deprivation of bile. The exact difference in the quantity of albuminous diet required to sustain a dog in its full weight without the aid of bile, is thus computed:—a dog of 4 kilogrammes in weight consumed daily 250 grammes of flesh; and now, by direct experiment, it was ascertained how much carbonic acid this dog expired, and the quantity represented 34.36 grammes of carbon in the day. If the flesh he ate had been pure albumen, it would not have been enough to meet this consumption at the lungs, for it would only have given 27 grammes of carbon, but the deficiency was made up by 19 grammes of fat, which gave 15 grammes of carbon. This, with the carbon contained in the salts of the meat, was sufficient for the demand at the lungs. The dog got 39 grammes of carbon in all and only required about 34.

But how was it with the dog that had its bile turned off? It was found to consume 47 grammes of carbon at the lungs in a day; but it lost 3.5 grammes of carbon by the escape of the bile, which had also to be made up, so that its demand was 50 grammes of carbon a day. Now all the fat he could get into his system, owing to the want of bile, was 10 grammes a day, yielding 7.8 grammes of carbon; so that there was a deficit of 42 grammes of carbon to be made up

by a corresponding increase in the quantity of albumen, to no less an amount than 400 grammes of raw meat to cover this enormous loss of carbon. This dog actually consumed 525 grammes of flesh, and required it all to keep himself in condition, while his fellow who had the use of his own bile, required only 250 grammes: hence the hunger.

It would however be an error to suppose that the only function of the bile was the assistance it gave the system in the absorption of fat; undoubtedly after its absorption, it discharges most important offices, in aiding those wonderful transmutations by which the external materials, out of which the body is made, are converted into flesh and blood. But into this mysterious region chemistry cannot follow; it notes its entrances and awaits it exit; but what transpires in the secret chambers of life, where conception is constantly going forward, is beyond its utmost efforts to penetrate. Again we see the fallacy of hoping to find in chemistry, a key to the cure of the morbid alterations in the vital actions, from which even in their normal state the chemist is entirely excluded. The chemist tells us that in the bile absorbed, there is always a minute quantity of sulphur, and that this sulphur plays an important part in the transformation of the tissues; but this is all, and the physiological chemists most candidly confess that there are probably an infinite number of uses of the bile within the economy, of which they know absolutely nothing. We have seen how important was the action of the nervous system upon the glycogenic function of liver, and we cannot doubt it is equally potent in its influence upon the quantity, and probably also the quality of the biliary secretion, as shewn by the sudden yellowness of the skin from anger or jealousy: but of all this, beyond the naked facts, we know absolutely nothing.

Even of the much more accessible department of knowledge—the influence of different kinds of aliment upon the quantity of the bile secreted—we know extremely little, and that little provokingly proves that this influence is very great. In the series of experiments made by Bidder and Schmidt to ascertain the effects of discharging the bile

directly from the liver, and depriving the animal of it, the effects upon the quantity secreted within a given time by different aliments, are noted by the way, and afford some curious and interesting, although imperfect information. The most certain fact ascertained, was that abstinence rapidly reduced the quantity of bile secreted, while flesh and water on the contrary, as certainly increased it. That eating flesh should do so is not surprising, but that pure water should augment not only the quantity of fluid bile, but of its solid constituents, was an unexpected result. The following table exhibits the fact.

Day of experiment.	While fasting the dog yields			Fed.		Now yields		
	In ½ths of an hour	Fresh bile	Solid residue	Beef.	Water	In ½ths of an hour	Fresh bile	Solid residue
		grms.	grms.	grms.	grms.		grms.	grms.
Nov. 7	4	1.558	0.040	—	185	4	5.165	0.143
„ 5	2	1.009	0.028	—	60	2	2.217	0.062
„ 3	4	2.689	0.085	25	158	4	4.030	0.177
„ 2	4	2.109	0.103	140	140	4	4.105	0.138
„ 15	2	0.397	0,046	160	—	{ 2 2	2.073 2.814	0.153 0.129
„ 17	4	2.001	0.217	185	—	4	2.883	0.135
„ 14	2	0.74	0.061	200	—	{ 2 2	1.486 1.442	0.100 0.058

It will be seen that in the first experiment, the drinking of 185 grammes of water increased the quantity of the bile delivered in an hour from 1.558, to 5.165, or more than four-fold. Here is an important fact for the water-cure! The effect of lard and butter was rather to diminish the quantity of bile as compared to the effects of a meal of flesh; but it would be rash to draw too many inferences from tables recording experiments made for a different purpose. The difficulty of the subject is very great, but as the zeal of experimental physiologists seems setting at present towards the liver, we may hope for much important addition to the present stock of our knowledge in regard to the action both of alimentary and medicinal agents upon this important organ; and we

cannot but look forward with hopeful anticipation to a rapid increase in our practical ability to cope with the multitude of affections which depend more or less upon some disorder of the hepatic structures, when we are made more fully acquainted with the value of each of its functions, the methods of gauging their efficiency, and recognising their aberrations, so as to bring them under better control, by more enlightened management and medication.

ON THE POISONOUS PROPERTIES OF THE YEW,

By Messrs. Chevalier, Duchesne, & Reynel.

Translated and extracted from the Journal de la Soc. Gall. Jan. 1856,

By Dr. Adrian Stokes.

(*Continued from p.* 441, *Vol.* xiv.)

The authors of the memoire have only looked at the toxicological side of the question, regretting their want of time for submitting the various parts of the plant to a rational system of experimentation, and they content themselves with enumerating the therapeutic properties attributed to it by the vulgarest and most unreasoning empiricism.

But how would they have proceeded to make a rational investigation of the subject? The numerous facts they have collected, and the experiments they have personally made have no therapeutic value in their eyes. We may fearlessly affirm that they would not have deduced from their therapeutic experiments any more clear or precise conclusions than they did from their toxicological. These were described without order or method, or logical sequence. To appreciate the value of these interesting facts so confusedly massed together, requires nothing less than a separate and distinct work on the materials furnished by MM. Chevalier, Reynal, and Duchesne.

The facts borrowed by these authors from others, and those furnished by themselves, may be ranged under four heads, viz: Toxicology, Pathological Anatomy, Pathogenesy, Therapeutics.

Toxicology.

The shade of the tree is said to have been fatal to human life: but this is denied by others, who state that no ill has resulted to man or animals therefrom.

The green leaves are reported to have destroyed the lives of three children and a young girl, but in what form or quantity they were taken remains unknown.

Many deaths of animals are recorded from ingestion of the green leaves, alone or mixed with oats, hay, bran or meal; while on the other hand several cases are stated in which the animals took the poison with impunity.

Fanny Fautrat and another girl are said to have perished from taking, the one a decoction, the other the expressed juice of the yew.

The stronger animals resisted the operation of infusion and decoction, which proved fatal to field mice.

The aqueous extract failed to do injury in four cases, but killed a small dog.

The dried leaves and their powder given to hens, cats, a leech, and a child, proved fatal.

The æthereal extract poisoned dogs when the gullet was tied, but when vomiting took place the animal recovered.

A child died from eating the berries, but four other children ate them without harm.

Numbers of fishes were poisoned by some yew roots thrown into a canal.

Of the recorded instances in the memoire we find that of 13 human beings who took various preparations of yew by design or otherwise, 5 escaped, 8 died. Of the inferior creatures subjected to experiment we find recorded 51 instances, in which 29 perished, and 22 escaped. Many others are said to have died from eating yew, but the particular instances are not given. The authors conclude from the facts accumulated :—

1st. That the mixture of yew with any kind of fodder is dangerous to animals, contrary to the opinion of Wiborg.

2nd. That the green yew leaves poison horses in the minimum dose of 700 grammes, and maximum of 1500 grammes mixed or not.

3rd. That the powder of the dried leaves causes in the same kind of animals rapid intoxication, and affects chiefly the nervous system.

4th. That yew plantations ought not to be in the neighbourhood of leech ponds.

This is a poor result of such long and patient researches, and such numerous experiments. How many remarks there were to be made on many important points! We will indicate a few of them; and first, the difference of action of different parts of the plant. Thus, there was no poisoning by the bark, the infusion of the green leaves, the distilled water, the aqueous extract, or the flowers. The bark however is not harmless, and we see more constant and rapid poisoning in animals that have eaten the twigs and the leaves than in those which have only eaten the latter.

It is to be remarked that the green leaves produce poisonous effects on man, especially on children much more quickly, and in smaller doses than on animals. The same is true of the juice and probably also of the other preparations of the plant.

We shall not notice all the contradictions observable in the authors' statements. The observations of Harmand de Montgarni are incontestable concerning the effects of the shade of the tree; and we must also admit those of Perna, Dalechamp, Gerrard, Puteaux and others, tending to show it is harmless. Perhaps the observations have been made under very different conditions of climate, which may perhaps reconcile the statements.

One of the most remarkable facts is the poisoning of a mare by 300 grammes of leaves which had served for an infusion which the same mare had taken on the previous day without inconvenience, whence it appears that the toxic principle of yew is insoluble in water. We have seen also that it is equally insoluble in alcohol.

Pathological Anatomy.

[It will hardly be necessary to go into the particulars of all the examinations in this place. The reader will have remarked the nature of the morbid changes induced by the poison in the recorded autopsies, to which he can refer.]

We remark that the anatomico-pathological lesions are not less variable than the toxic effects. It is indeed impossible to give reasons for the difference of the results under conditions so nearly alike. The lesions are at one time very decided, at another time there are none. They are now deep and extensive, now slight and superficial. They are sometimes more remarkable when the examination was made some time after death, at other times they are less so, and again they are occasionally most evident when the body is opened immediately after death.

The most constant lesions, however, in man as well as in the inferior animals, are the streaks on the skin, the ecchymotic spots on the gastro-intestinal mucous membrane, the venous congestion of the brain and spinal marrow, the engorgement of the liver and gall bladder. Certain lesions have been observed frequently, but only in the brute, viz: the intestinal rash similiar to dothinenterite, the inflammation of Peyer's glands, the exudation on the surface of the gastro-intestinal mucous membrane of a viscid, sticky, and as it were plastic mucus, the injection of the peritoneum, pleura, &c.

We shall not dwell on a number of anatomico-pathological lesions observed in one case, and in none of the others: they are too numerous to have escaped the reader's attention, and show the futility of pathological speculations in a nosographic as well as in a therapeutic point of view.

Pathogenesy.

[This being a matter of much moment to our body, no apology is made for re-stating here, succinctly the effects of the different parts of the plant on men and animals.—Tr.]

Bark.—A journeyman potter affected with quartan fever for 16 months, took an infusion of fresh bark in wine. He had two stools the same day; a month afterwards his body became covered with itch and pustules: all the hair fell off his head and body in two days, and during a month he remained in a state of imbecility. The skin then got well, but remained of a dirty leaden hue. Twice since taking the yew he has had obstinate attacks of black jaundice.

One of the authors took a cold infusion of fresh bark from

the twigs, made with wine, thirty grammes produced no effect whatever.

Shade.—In half-an-hour violent pain in the head preventing further work. (Ray) Lethargic state in a boy, lasting several hours. A servant who passed a night under a yew tree had a miliary eruption all over the body, and for the next two days was as if drunk: the third day the eruption suddenly disappeared, and there was an abscess formed in one knee, which burst on the fourteenth day.

Green leaves.—Three children who had eaten of these at 7 P.M., were seized at 9 with chills, sleepiness and convulsive movements. One of them vomited and was griped.

The horses observed by Gerrard drooped their heads, had cold ears, yellow swelled tongue, inflamed nostrils, dull eyes and heaving flanks. A mule had erection and emission. M. Delcroix observed in three colts, drooping ears, half open eyes, dilated nostrils, moving very slowly, absolute insensibility to blows or punctures, muscular tremors in the hind quarters and limbs, cold skin, hair rough, belly distended, great flexibility of the loins on pressure, limbs stiff and fixed on the ground like posts, vacillating gait, especially with the posterior limbs, the breathing slow, so that it seems now and then suspended, the tail quivered, the anus was open and gas and semi-fluid matters of extreme fœtor passed through it.

From time to time the animals fell down, uttered plaintive moans, and looked round at their flanks.

The urinary function was greatly excited, the animals urinating freely every 10 minutes, and passing clear and abundant urine with plaintive moans, the act of doing so contrasting singularly with the rigidity of their posture at other times. The penis remained pendant, and the animals remained fixed in posture as if they could not recover their position. Pulse slow, small, nearly imperceptible, heart-beats not to be felt, resonance of the walls of chest on percussion, the mouth was cold and dry, the membrane colourless, anorexia complete.

In a mare, uneasiness, slight colic, borborygmi, she shakes her head. During two hours the pulse rose from 52 to 75, pretty strong, breathing deep and slow,

In a dog, after 3 hours, somnolent state, head moved from side to side, eyes dim and sunken, occasional contraction of the limbs.

Fish become stupefied by yew thrown into ponds, and may be taken by the hand.

Mixed leaves.—In a mare, from 1200 grammes, uneasiness, she turns about to listen, remains quiet with her head resting on the manger, breathing a little quickened, mucous membrane reddened, especially the buccal.

In a horse, from 1500 grammes, in half-an-hour sadness, the head drooping, immobility, then uneasiness: he rubs his head against the manger. Breathing nearly normal, perhaps slightly quickened. The horse then fell on his right side, raised his head and showed his eyes rolling, the limbs became stretched out and stark, the breathing slow, with strong inspirations, the nostrils dilated, the mouth open. The head fell on the ground, the limbs remained stretched out, the breathing became slower and slower, the inspirations deep and slow, while the expirations were short and quick, giving a shock to the whole body.

Slight diuresis in a horse from 800 grammes. In a mare, 300 grammes of leaves acted on by boiling water, caused in 3 hours irregularity of pulse from 30 to 50 per minute, borborygmi. The mare rose up but staggered and laid down again, which she did several times.

Juice of the leaves.—In a girl, in a few hours it produced great malaise, dimness of sight, giddiness; in a short time she could not see anything and fell into a state of deep drowsiness.

In a pregnant bitch, from 120 grammes of leaves reduced to pulp: (the limbs and muzzle were tied during three hours) efforts to vomit and expulsion of green mucus with bits of the leaves in it. In the course of the day she showed sadness, loss of appetite, general excitement so that the least touch called forth plaintive howls, the gait hesitating and staggering, particularly on the hinder extremities. The weakness increased for 24 hours, when she could hardly stand, and was excessively drowsy; during her last hours there was a slight bloody discharge from the vulva.

Decoction of leaves.—In a mare, caused the pulse to rise in an hour from 56 to 80; in the second hour it fell again to 50.

Distilled water.—Two bottles given to a mare at noon, caused the pulse to rise in 2 hours from 44 to 52, and become weaker. The respirations rose from 18 to 28. At the third hour 46 pulsations, 35 respirations, irregular; weakness and bending of the limbs, slight sweat in the groin and on the belly.

Next day the same animal took two bottles more. A few blotches soon appeared on the skin, in isolated bumps, which, during the day, gradually increased so as to cover the whole body by evening, the blotches running together on the loins and other parts so as to form patches as large as the hand. This eruption disappeared the following day, and after 24 hours more there was no trace of it.

Watery extract of the leaves.—A magpie was made to take during three days, 80 grammes of this preparation, which caused copious evacuations on the second and third days.

In a dog, 5 grains the first day, 60 the second day, 240 the third day, produced frequent stools, and afterwards profuse purgations.

Thirty grains dissolved in water were injected into the jugular vein of a strong dog. In two minutes afterwards he became giddy, the head seemed heavy, and the hinder extremities began to bend. In five minutes he appeared to be on the point of falling, when he suddenly came to again.

Leaves dried, and in powder.—A scruple of powdered bark and leaves given to a dog each day for three days, only caused thirst and loss of appetite. The same dose given to a cat, caused vomiting: a week afterwards its skin became covered with itch, it refused to eat or drink, and pined away.

Five hundred grammes (1 lb.) of powdered yew were given to an old stallion in good health and fasting. Forty minutes after ingestion the animal suddenly started back, and threw up its head, then the hinder extremities became weak, and he fell heavily on the right side. He tried in vain to rise. The breathing was quick, the mouth open, nostrils dilated, eyes rolling. This state was followed by quiet, the respiratory movements being perceptible only at intervals of 15 to 20 seconds.

Another stallion took the same quantity, gave a sudden start back, then grew weak, and made irregular movements with intervals of calm. Four other horses showed the same symptoms.

Yew powder exhausted by Æther.—This preparation caused in a dog whose throat had been tied, violent efforts to vomit, contraction of the abdominal muscles, purging of liquid matters of excessively fœtid odour.

Æthereal extract.—In a pointer, violent efforts to vomit, ejection of mucus mingled with bits of meat, continued loud howling.

Three grammes given to a dog whose mouth was tied, caused prostration in half-an-hour. He howled, expiration was deep, and his ribs seemed to be twisted. Afterwards there was contraction of the muscles of the chest and of the abdominal walls.

Of five children who ate of the berries, one had convulsions immediately, the lips became purple and the pupils dilated.

Diarrhœic stools in children who had eaten yew berries.

These effects, apparently numerous and different on men and brutes, are reducible to few, if they are presented methodically, and if we only notice such as are common to a certain number of cases. We shall group them in this manner in our resumé.

Physiological effects on man.

Convulsive movements; diminution of intellect—imbecility; intoxication; violent headaches; giddiness; somnolence; sleepiness; chilliness; falling off of the hair; itch—pustules—miliary rash; grey and leaden hue of skin; dimness of sight; evacuations; diarrhœic stools.

Physiological effects of yew on animals.

Marasmus; irregular movements; starting backwards; vertigo; uneasiness; sadness; insensibility; increased general sensitiveness; plaintive cries: muscular tremors.

Head.—Heaviness of the head; drooping of the head; movements of the head; swinging about of the head.

Ears.—Coldness of the ears; drooping ears.

Eyes.—Dull; half open; sunken; rolling; conjunctiva tinged yellow.

Nostrils.—Swollen and dilated.

Mouth.—Cold and dry; membrane pale; membrane red. Tongue yellow and swollen.

Appetite and Thirst.—Anorexia; voracious appetite; thirst.

Stomach and Abdomen.—Vomiting; colic and borborygmi; distension of abdomen.

Anus and Stools.—The anus is open and allows semi-solid matters to escape; copious evacuations; frequent stools; purgation—passage of very fluid matters of very fetid odour.

Genito-urinary Organs.—Erection and emission; penis pendant after urination; frequent calls to pass water; diuresis; blood passes from the vulva.

Respiration.—Heaving of flanks; slow breathing; quickened breathing, followed by slower breathing; irregular breathing.

Trunk and Extremities.—Whisking of the tail; stiffness of the limbs, contraction of the limbs; unsteady gait; weakness of the hinder limbs; weakness of the fore limbs.

Skin and Hair.—Hair stands on end, and is rough and staring; skin cold; eruptions on the skin; itch; sweat in the axillæ and groins.

Circulation.—Beats of the heart scarcely perceptible; pulse small and slow; pulse strong; number of beats increased; rising and then falling of pulse; irregular pulse.

This pathogenesy, although much less extensive than that given by Dr. Roth in the first vol. of his *Materia Medica* includes some symptoms not given by him. Thus the weakening of the intellectual powers, imbecility, intoxication, giddiness, falling of the hair, dimness of sight, are not in his pathogenesy.

As to the symptoms produced on animals, especially on horses and dogs, they bear on all the principal regions, as may be perceived from the above resumé: on the systems of innervation, circulation, digestion and respiration; on certain organs and tissues more especially.

These symptoms do not constantly appear in all the experiments; but if some are wanting in certain cases, at least we do

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not meet with such marked and numerous contradictions as in the anatomico-pathological effects.

This fact is very worthy of attention, and shows how much more positive are the pathological indications drawn from semiology, and the therapeutic indications drawn from pathogenesy, than those furnished by the knowledge of post-mortem appearances.

Anong the symptoms observed in animals, we remark in one case paleness and in another redness of the buccal mucous membrane. These are not alternating effects, they are simply the results of different physical actions of the substance, arising either from more or less prolonged contact, or (as is the fact) from the difference in the mode of administering the medicine, for in the case where the membrane was pale, the yew had been browsed by the colt, and in that where it was red, the leaves had been given mixed with barley meal.

As to the effects on the digestive organs, most of the animals showed a diminution or entire loss of appetite. In these cases the doses were all poisonous. The only one in which the appetite was increased, presented no other physiological symptom. We are therefore right in insisting on the constant nature of the physiological effects, when compared with the variableness of the anatomico-pathological lesions. For we do not think that the increase or diminution of the pulse produced on various subjects or on the same subject in the same experiment; or that the increased quickness or slowness of the breathing are to be considered as contradictory. They are evidently only secondary effects of the action of the yew on the nervous system, varying more or less according to the interval that has elapsed from the time of its injestion.

We have seen from the experiments and facts of the authors that the poisonous principle of the yew was not dissolved by water, even when boiling, nor by alcohol. This would go to lessen the value of a great number of homœopathic medicines, which are prepared exclusively by digestion in spirits. We have seen that they operated only with parts of the plant, and not with the entire plant, as is always done in our pharmacies. Their experiments, to have been conclusive, should have been made

with not only the leaves, but with the twigs, the bark, and the whole plant, in various states of freshness or dryness.

It is necessary to distinguish carefully the physiological from the toxic effects. There is a vast difference between the slight symptoms produced by a violent poison in weak doses, and at the beginning of its action, and the violent effects of large quantities. The most constant symptoms were produced in those cases in which poisoning either was retarded, or did not take place at all.

These negative results obtained by MM. Chevalier, Duchesne and Reynal, show how careful we should be in our experiments on healthy persons, to state what preparations are used, what parts of a plant, its state of freshness or dryness, &c. It would be well to institute fresh experiments with the medicines used in homœopathy, in order to determine whether the active principles reside in one part more than in another, and whether these principles be soluble in water, spirit, or æther. The uncertainty which prevails in this matter, justifies the almost exclusive confidence which some of the first practitioners give to triturations.

Therapeutic effects of Yew,

We have given the instances in which the yew has been used as a curative agent. There are some among these which merit notice, *e. g.*, the cures of epilepsy obtained by Harmand de Montgarin with the aqueous extract of the leaves. A case of rickets cured by aqueous infusion of the bark, by the same; the observation of Gatereau relative to a man cured of rheumatism by the aqueous extract: the cure of three cases of quartan fever by an opiate prepared with powdered bark and leaves mixed with vinous extract of yew: the advantageous treatment by Percy of coughs with a jelly made of the fruit: lastly the cure of an officer subject to gravel by the syrup of the fruit,

The authors make no comment on the cures of epileptics, although they record epileptiform symptoms as produced by the plant:—in man, convulsive movements, intoxication, violent headache and giddiness, with disordered movements. In animals, vertigo, disordered movements and muscular tremors, vio-

lent falls as if they were thunderstruck, stiffness and contractions of the limbs, &c., &c. They have evidently not seen any relation between the physiological symptoms and the curative effects. They have frequently mentioned stiffness and weakness of the limbs; and if they have not noticed particularly, wandering pains in those parts. we may suppose they have overlooked the pathogenetic properties of the plant, having no interest to study it in this aspect. But it is not the less certain that their incomplete facts show the cure of chronic rheumatism of the shoulder by Gatereau to have depended, by a manifest relation, on the power of the plant to produce an analogous condition.

The cure of the officer afflicted with gravel, by Percy, recalls the difficulty of urinating, alternating frequently with flow of limpid urine, mentioned by Harmand de Montgarni.

As to the cure of the ricketty child, and the cases of cough by the syrup, they are interesting as being offered by conscientious observers, but they have no relation to the facts stated directly by Messrs. Chevalier, Duchesne, and Reynal, or borrowed by them from others.

No phenomenon analogous to the intermittents cured by Harmand, are recorded in the memoire. In animals, they observe only perturbations of the pulse, coldness of the skin, and in one case, sweat of the body. But in the pathogenesy recorded by Dr. Roth, we find the following group:—" general shiver for some minutes at 2 A.M., followed by dry heat of the hands and especially the feet, with general malaise; mouth dry without thirst; then abundant sweat on the forehead, which terminates the attack in three hours from its commencement.

The best proved curative effects of the yew have an evident relation of similitude to the most certain of its pathogenetic effects. And this relation would not have escaped Messrs. Chevalier, Duchesne and Reynal, had they been guided by a philosophic idea. Had they merely confined their researches within the narrow bounds of toxicology, they ought to have been led by the verification of facts asserted by their predecessors, either to establish or disprove this relation, which was known long before their time, and affirmed by authors on Homœopathy in Germany and France.

But our authors have not over-looked the pathogenetic effects, which they indeed relate at considerable length. Like ourselves they carefully distinguish the physiological from the pathological effects, and with us they seek to ascertain the most constant physiological actions. They remark particularly the eruptions on the skin and mucous membranes, and call the special attention of dermatologists to the former. And why? unless with a view to therapeutic application. They can support the assertion of the most enlightened physicians, from Cullen, Murray and Hahnemann, to Bretonneau, Trousseau, Pidoux and others, that *the physiological action of medicines is the only source of indication for their therapeutic use.* How then have they failed to stumble on this similitude? Theirs was the opportunity to solve the question, to dispel every doubt, and banish all future uncertainty! And while they were reasoning the matter, they ought not, we think, to have halted in the midst of the argument, and have so cleverly evaded the conclusion.

Our authors bring out the principal points of yew poisoning in animals as identical with the effects observed on man. They carefully note the epileptiform phenomena observed by them and before them on animals after taking yew: the rheumatic pains, the disturbances of the urinary function, &c.: and on the other hand, they register cures by the same substance, of epilepsies, rheumatism, gravel, related by Harmand and Percy. They speak of the action of yew on the womb in human and brute subjects, and of the death of the fœtus, and its expulsion in nearly all cases even after the mother's death. In one experiment they noted the passage of blood from the vulva, and by and bye relate that yew has been recommend in amenorrhœa. On the one hand they give the relation of similitude, on the other, that of apparent contradiction between the physiological effect and the curative effect:—a decisive argument against homœopathy. It cuts both ways it is true, and might equally well be turned against the therapeutics of "contraria." The authors have found it more convenient to leave the difficulty where they found it, and to forget their promise of dispelling doubt and banishing uncertainty.

Had they entered fully into the question, they would have reasoned thus: the experiments of Messrs. Chevalier, Duchesne, and Reynal, and the observations quoted by them, and which have certainly not been made or collected for the particular purpose, attest in many instances a relation of similitude between the physiological and curative effects, sufficiently strong to bring it under serious consideration. If yew has been recommended for amenorrhœa, the primitive effect ought, in order to prove the curative effect to be in opposition to the physiological effect on the womb, to be ascertained upon that organ in a state of marked rigidity. In the absence of all documentary evidence on this subject, we must suppose that the womb was in all the cases cured by the yew, in a state of marked relaxation and atony. And in fact the action of yew on the womb in the different cases related, is manifested when the organ is distended by the fœtus and the liquor annii, and its walls unaffected by any contractive effort.

Then, the similarity between the physiological and curative effects being proved, dermatologists will have a real interest in determining the true characters of the eruption with falling of hair which have been remarked in the cases of poisoning.

That is what Messrs. Chevalier, Duchesne, and Reynal, ought to have said, and would have been obliged to say had they been consistent. And they would have added: there is need for experiment with this plant on healthy persons, in small doses, with a view to ascertain if it produces the same symptoms on man as on animals; we shall thus be enabled to gain a knowledge of its sphere of usefulness. These were the conclusions we had a right to expect, and which not having found, we have propounded ourselves in the remarks we have thought it necessary to make in order to bring out the theoretical and practical conclusions of this memoire.

There is yet one point of great interest, and that is the *treatment* of poisoning by yew. We are not told if M. Dujardin saved the two colts he attended; but nothing is said of the examination of their bodies, and it is therefore probable that they may have escaped. But it would be very important to know some medicine which would antidote the poisonous effects of the

yew after its evacuation from the stomach. Doubtless the symptoms would furnish indications in any given case, and by the mere comparison of symptoms we may suppose that Rhus tox., Nux vom., and their analogues would render valuable service. Careful experiment is needed however, to ascertain what are the medicines capable of most successfully opposing the action of this poisonous substance.

GLYCERINE,

BY DR. CHAPMAN.

MY object is to call the attention of our colleagues to the value of glycerine as a local application in some skin affections, and to suggest its probable value for other purposes.

Scheele discovered it in 1789, and called it the "sweet principle of oils"—hence the very appropriate name *glycerine.* Some twenty-five years later Chevreul shewed it to be the base of fats and fat oils. To his scientific experiments the art of candle-making is indebted for having become a practical science. He and Gay-Lussac sketched out, in 1825, the proposition for distillation of fatty bodies: it was not carried into effect till 1840, when Mr. George Gwynne took out a patent for this purpose. In 1842 Messrs. Price and Co. began their experiments: and finally have obtained purified glycerine by distillation. Formerly this glycerine was considered to be a nuisance—an abomination to be got rid of, as all will remember who have suffered from the snuffing out of a candle in by-gone times. Now this pure glycerine is being turned to excellent account; and this is one of the triumphs of modern science.

It is now applied in medical practice; it has been used in photography, and is likely to prove a most valuable photographic agent; it is used as an antiseptic for the preservation of meats and delicate fruits; it is employed as a hair-wash; it is regarded as one of the instruments for the civilization of Africa: this through the palm oil of the wool-headed

gentry, who are described as having an uncommon aptitude for trade.

Mr. G. F. Wilson, F.R.S., thus describes the new process for obtaining and purifying glycerine :—

"Our first step was to do away with the lime process of saponification, and with it our only source of impure glycerine. By our first improvement in separating the fat acids from neutral fats, the glycerine was decomposed by the direct action of concentrated sulphuric acid at a high temperature; and all that remained of it was a charred precipitate. A new process for decomposing neutral fats by water under great pressure led us to look again more closely into our own distilling processes; and the doing this shewed, what we had often been on the brink of discovering, that glycerine might be distilled.

"In our new process the only chemical agents employed for decomposing the neutral fat and separating its glycerine, are steam and heat; and the only agents used in purifying the glycerine thus obtained, are heat and steam. Thus all trouble from earthy salts or lead is escaped.

"In an ordinary apparatus the glycerine distilled from neutral fat is not in a sufficiently concentrated state for most purposes; it should therefore be concentrated, and, if discoloured, be re-distilled. It is then obtained at the temperature of 60° Fahr; it is of a specific gravity of 1·240, and contains 94 per cent. of anhydrous glycerine. It can be concentrated to S. G. 1·260, or to contain 98 per cent."

Our present business with this agent is to consider its use for medical purposes. Mr. Headland has, at my suggestion, made sundry preparations of glycerine, and has triturated it. I am engaged in making experiments; whether it has any direct and specific medical action I am not yet prepared to say; but my object in sending this brief notice of this seemingly important agent, is to request our colleagues to *prove* it. My own experience of its value as a skin-remedy is, to myself at least, quite satisfactory. For chilblains and chapped hands, for cracks of the lips, for painful irritation of the skin, for ulcers, *acne*, and various other affections, I have

found it an excellent topical remedy. It soothes the skin and keeps it moist. It has been used by our allopathic brethren for some years, in skin diseases, with the most unequivocal success.

For internal use the purified glycerine of Messrs. Price and Co. should be employed, to secure its freedom from lead. For external use, also, it is obvious that the really pure glycerine should be used.

The medical history of this agent runs thus: Mr. De la Rue in 1844 applied it to a burn, and to an irritating cutaneous affection; and soon after Mr. Startin introduced its use into the Hospital for Skin Diseases. He thus expresses himself on the value of this agent:—

"Another very efficacious means remains to us in glycerine, which, as a palliative in squamous affections of the skin, has not, to my knowledge, been hitherto made known or adopted; in fact, it is peculiar to myself, and although I have not as yet addressed the profession or any learned body on the subject in accordance with my intention when my observations are matured, I will, nevertheless, here announce it for your consideration. It consists in the employment of this liquid, discovered by Scheele at the end of the last century, which has the property of remaining fluid and resisting evaporation under any temperature to which the body can be exposed. Indeed, I have wetted a common dinner plate with it and kept it in an oven whilst a joint of meat was cooked by its side, and the liquid has experienced no evident change or diminution. The facility with which this body mingles with water or other fluids, even oils, renders it an invaluable adjunct to lotions, poultices, embrocations, and applications, the utility of which may consist, not only in diminishing temperature by evaporation, but in softening and relaxing the heated and inflamed skin. The tendency to dry up and adhere to the part, as is well known, often frustrates the beneficial effects of these applications. and various counteractive expedients have, consequently, been adopted, as the addition of fatty matters, or covering the lotion, poultice, &c., with oiled silk. Now this is rendered totally un-

necessary by the addition of glycerine. You will perceive it has the appearance of oil, and when rubbed on the skin it furnishes a thin coating or varnish, which even the microscope fails to distinguish as different from the ordinary secretions of the part. Half an ounce of the liquid added to half a pint of lotion, will prevent the skin from becoming dry. . . . . .

"In the use of glycerine internally, I have had little experience, but it is a mild stimulant, antiseptic, and demulcent, and might be employed to sweeten many articles of food or drinks for those invalids whose disordered digestive organs forbid the use of sugar. I briefly enumerate some of the diseases of the skin in which I have employed *glycerine* as a *local palliative* with most benefit and success. These are; pityriasis or dandriff, lepra, psoriasis, lichen in its advanced stage, eczema, impetigo, and prurigo. I have found glycerine also a useful addition to lotions in the encrusted forms of lupus or herpes exedens, and for various syphilitic or strumous eruptions, having a tendency to produce fetid discharges and hard crusts; for which reason also, it has proved of service in the scabbing stage of small pox to prevent scars and pitting. As a wash also for the hair, and for chapped hands and nipples, combined with a little rose water and a few grains of borax, the glycerine being in the proportion of from one-eighth to one-sixteenth, this remedy furnishes, perhaps, one of the most elegant and efficacious preparations which have been introduced. It may also be combined with soaps, which it renders peculiarly softening and detergent, particularly for individuals who have a hard or dry skin."

Those who wish to read Mr. Startin's communications, *in extenso*, on the subject of glycerine, will find them in the *Medical Times*, vol. xiii (1846) and vol. xxi (1850).

In the *Lancet* of June, 1849, Mr. Thomas Wakley reports a number of cases in which glycerine has been useful or curative in cases of some kinds of deafness; and in the same periodical, in the course of the same month and year, Mr. Wakley's results are confirmed by Dr. Gardner and Mr. Erasmus Wilson.

M. Cap, however, seems to have been the first to recognize the value of glycerine, in a great variety of medicinal preparations

(*Journal de Pharmacie et de Chimie*, February, 1854). Dr. Crawcour, of New Orleans, has extensively used glycerine as a substitute for cod liver oil.

When they use it internally, the allopaths give glycerine in doses from one to three dessert-spoonfuls in water two or three times a day. Its employment as a substitute for cod liver oil is well worth the consideration of those who have been in the habit of giving that oil.

The writer is of opinion that it would be of great use for burns. In one case of a severe scald from boiling water it acted like a charm.

He has used it extensively for chilblains and chaps, and with decided benefit; and has found it very useful in prurigo. He has applied it in several cases, with marked success, to fetid ulcers. It would, no doubt, be found very beneficial for frost-bites; and in one case of wound he found it very useful.

He believes it would be very useful as a local application in erysipelas.

He proposes that it should be tried as a remedy in *diabetes*.

He is very anxious that it should be *proved*, to ascertain if it has any positive medicinal action. From its remarkable anti-septic virtue, there is every reason to suppose it has.

Mr. Headland has prepared a glycerine opodeldoc and a glycerine cerate. The purified glycerine for internal use may be obtained either from him, or from Messrs. Price and Co., Belmont Works, Vauxhall. The writer has used it, internally, in the proportion of a dessert-spoonful to a tumbler of water; and in like proportion as a lotion.

Mr. G. F. Wilson has informed the writer that it is not deteriorated in tropical climates, and that it answers for preserving vaccine matter, so that it may be kept uninjured in the tropics. A great variety of glycerine compounds is being made and experimented on.

The preparation of purified glycerine, and turning it to good account in divers ways, is one of the triumphs of chemical science; and no small debt is due to Mr. G. F. Wilson for the scientific improvements he has made for its production free from impurities of any kind. As a minor abomination has been

turned into a positive good, it is to be hoped that, in another generation, the impurities of the Brick Babylon, known as London, which now poison the air, and make the once "Silvery Thames" a foul and polluted stream—the cause of disease, not of health—may be removed and turned to good account also.

REMARKS ON THE DIFFERENT MODES OF ADMINISTERING HOMŒOPATHIC MEDICINES, WITH A VIEW TO THE DISUSE OF THE GLOBULE.

By Stephen Yeldham, M.R.C.S.

"Custom, without reason, is no better than ancient error."

The globule.—The globule, in its simple unmedicated state, is the smallest possible quantity that can be rolled into uniform shape and size, of a compound of sugar and starch. It is medicated by being soaked in the tinctures of the different medicines; and, as the ingredients of which it is composed, though readily soluble in water, are insoluble in spirits of wine, (with which the tinctures are made) it retains its original form after saturation. Its potency is determined by the potency of the tincture with which it is saturated. It was originally intended by Hahnemann that, as a rule, a single globule should be the standard dose. This, however, has not been adhered to, and it is now administered in varying numbers according to circumstances, as well as in various ways, viz., placed in its dry state on the tongue; crushed and mixed with sugar of milk in the form of powder; or, dissolved in pure water.

The globule presents many advantages as a mode of administering medicine, both for the medical man and the patient, such as portability, minuteness, tastelessness, &c., but these advantages are shared equally, as we shall presently see, by other forms of medicine which are free from most of the objections which attach to the globule.

Of these objections one of the most prominent is the tendency which the globule engenders to a slovenly and careless mode of practice. Few medical men, at the present day, restrict themselves to the one globule dose. On the contrary, directions are generally given to take two or three globules at a time; or an indefinite number—for who shall count them?—are thrown into a tumbler of water. The patient, observing this, as he sometimes must do, and, not knowing that the dilution, and not the quantity, is the important point, naturally questions the efficacy of a system of medicine which admits of such a careless and indifferent mode of prescribing.

The present generation have been taught to regard a dose of old physic with feelings of respect for its power to do good or harm. The want of this salutary feeling with reference to homœopathy, and which is owing to the minuteness of the globule, has led to the system itself being lightly thought of, and to the medicine being trifled and played with in domestic practice: a state of things which a more definite and imposing dose would entirely obviate.

There are some other objections of a practical nature, common to the globule and the powder, which, to avoid unnecessary repetition, will be noticed under the latter head.

But these objections, not unimportant when viewed by themselves, sink into insignificance when compared with the moral influence which the globule has exercised over the progress and present position of homœopathy.

Those who are not prepared to subscribe to the assertion, not unfrequently heard now-a-days, that "the globule is the curse of homœopathy," will scarcely deny that it has operated as a heavy blow and great discouragement to our cause. For our system it has earned the greater part, if not all, of the abuse and ridicule which have been heaped upon it; and for ourselves, its practitioners, the not very dignified title of "Globulists." If all this were necessary and unavoidably associated with homœopathy, then, I am sure, there is not one amongst us who would not cheerfully submit to this, or any greater amount of odium, in support of what he knows to be the truth. So far from this being the case, we assert that

it is altogether avoidable and unnecessary. The globule forms no essential part of homœopathy, either theoretically or practically. It is a mere form, which we have voluntarily adopted, and which it is equally in our power at any moment to repudiate.

That the globule constitutes the most insuperable barrier to the reception of homœopathic doctrines, by the professional as well as the non-professional mind, is, we think, undeniable. Persons disbelieve in homœopathy, not as a system of medicine, for of that they cannot be expected to know much; they disbelieve in the small dose, not as involving the doctrine of the development of medicinal power by minute subdivision of particles, for of that they know even less; but they disbelieve both in homœopathy and the small dose, simply as they are represented by the globule. Take away this, and their disbelief vanishes.

There is a proneness in all reformers to run into extremes. This arises from a natural repulsion in the mind between what they regard as their former errors and their later belief; and this tendency receives an additional impulse from the opposition which their new doctrines are almost sure to encounter. Hahnemann found in old physic vagueness, complexity, inconsistency:—he found unanimity in nothing but the pernicious practice of administering large quantities of powerful medicines. What wonder if, having discovered the true law of cure, and the scarcely less important fact that power is eliminated by the minute division of matter, he should push this latter point to its utmost limit, and teach that diseases should be treated not only by medicines in their highest state of attenuation, but that they should be administered in the smallest possible quantity? With admirable discrimination he selected the most suitable substance in nature in which to exhibit his medicines. His great error—for such we must regard it—consisted in moulding this substance into a form so unnecessarily small as the globule.

The globule was introduced with a view to the minuteness of the dose. But, we maintain, that within certain reasonable limits, the quantity, paradoxical as it may appear, has, pro-

perly speaking, little or nothing to do with the dose; the dose, we mean, as expressing *power* or *potency*. This, it is evident, is regulated by the attenuation, or dilution, of the medicine, and not by the number of globules, or drops, of any particular dilution. Take, for illustration, the third dilution, the lowest that is ordinarily prescribed. One drop of this, according to Hahnemann's mode of dilution, contains a millionth part of a grain or drop of the original medicine; and is said to be equal to 200 globules. Now, it is not uncommon to see either a drop of this tincture, or a globule, prescribed, indifferently, to the same person, in the same disease: the one representing a millionth, the other the two hundred millionth part of a grain of medicine. Can it be imagined that the medical man contemplates such a difference as this in his dose? Clearly not. What he intends to do, and what alone it is important that he should do, is to be sure that he gives *some portion* of the third dilution. That this is the correct view of the case, is evident from the fact that many medical men discard the globule, or at least employ it only in chronic cases, and use the tinctures, because they cannot feel satisfied that the former contains that positive amount of medicine which they wish to administer.

But, that to which, more than to any other consideration, the globule has owed its prolonged hold upon the profession, has been the fear of aggravating the disease by an over dose of the medicine. Hahnemann, probably impelled, as we have already suggested, by a powerful revulsion against the old system of drugging, and alarmed at the energetic action which he observed to follow the ordinary doses of medicines when administered in accordance with the homœopathic law, rushed into the opposite extreme, in order to avoid these perturbations or aggravations, as he called them. This movement, up to a certain point, was perfectly right and philosophical; but, operated upon by an active imagination, he believed that he observed these aggravations as the frequent result of infinitesimal doses of medicine. It would be presumptuous to assert that these appearances were fallacious, and that Hahnemann was deceived; and we are not war-

ranted in asserting that such effects are never witnessed. We do not, however, hesitate to affirm that, at the present day, in England at least, these aggravations are very rarely observed, and that some are inclined to discredit their occurrence altogether. Ceasing to look for them, medical men cease to see them. Medicines are prescribed more boldly, more freely, and, we believe, on the whole, more successfully. The nervous apprehension with which homœopathy was formerly practised, is fast disappearing, and, with it, the necessity for the globule.

The powder.—The powder, composed of sugar of milk, is merely a vehicle for the exhibition either of globules, triturations, or tinctures. In the former case the globule is placed in the centre of the powder, and there crushed with a proper instrument, and mixed up with the sugar of milk. A powder may thus contain either a single dose, in which case it is taken dry, on the tongue, or dissolved in water; or a sufficient number of globules may be inserted for any number of doses, in which case the powder is dissolved in the desired quantity of water, and taken in spoonful doses at a time.

There are many conveniences attending this mode of giving medicines. But it has many disadvantages. It is at all times difficult to count the number of globules; and there is a risk of their not all being crushed, and so, of some of them being lost; or the globule is apt to adhere to the paper in crushing, and the sugar of milk only is swallowed. When kept in damp places, the whole powder sometimes becomes dissolved and escapes, and the patient, to his disappointment, unfolds an empty paper. In hot weather, when dissolved in water, the vegetable matter of the powder undergoes rapid decomposition, and the whole mixture becomes thick, ropy, offensive, and useless.

When the powder is made use of for conveying a tincture, a few drops, more or less as may be desired, are dropped upon the sugar of milk, which becomes saturated, but not dissolved, thereby. This, like the globule powder, is dissolved in any prescribed quantity of water, and taken all at once, or in repeated doses. The tincture powders, although

often a convenient resource for giving medicine, is open to most of the objections which attach to the globule powder, with this additional one, viz.—that the drying of the powder after saturation is apt to stagger those patients who do not understand that the sugar of milk, having been once impregnated with the medicine, retains its virtue, notwithstanding the evaporation of the surplus tincture. It is not always easy to convince the patient of this. He puts the wet powder into his pocket, satisfied that he has a powerful dose of medicine; unfolding it a few hours after, he finds all the tincture flown, and the powder as dry as a bone! No wonder if he suspect that all its virtue has flown also. The practice of medicine, well conducted, ought to be exposed to none of these mishaps. The old system is free from them.

Tinctures.—The tincture is the original form of the greater number of our medicines, especially the vegetable productions. The medicinal parts of plants are macerated in spirits of wine, strained, and from this (the mother tincture as it is termed) the subsequent dilutions are made. Mineral substances are first reduced to fine powder by trituration with sugar of milk, and then formed into tincture by solution in spirits of wine. The tincture may be administered in various ways: in saturated globules and powders, as already described, or simply mixed with water. In this latter case it is either formed into a mixture in bottles or glasses by the medical attendant, or given pure to the patient in a small bottle made for the purpose, with directions how it is to be mixed and taken. This, though one of the best modes of administering medicine, is not without its drawbacks. We have already alluded to one when speaking of powders; another is the difficulty the patient experiences in mixing the tincture, when left to his management. It is awkward to drop it out of the bottle—it either runs down the bottle on to the fingers, or too much of it escapes at once, even with the steadiest hand; and it is inconvenient to men of business, inasmuch as the mixing entails the necessity for water, glasses, spoons, &c., which are not always at hand. It is also very inconvenient for transmission by post: a

mode of conveyance to which most homœopathic practitioners are compelled frequently to have recourse.

The pilule.—The pilule,* being of the same shape and composition as the globule, differs from it only in size. It is, in fact, a large globule or small pill. It may, of course, be made of any size, but that which we employ is about half as large as an ordinary five-grain pill.

We have now had it in extensive use for some time, and having watched its effects carefully in acute as well as in chronic disorders, we have no hesitation in recommending it strongly to our medical brethren as a complete substitute for the globule, both in convenience and efficacy. We will go further, and say, that we regard it as far superior to any other mode of administering medicine, always excepting the mixing of the tinctures with water by the medical man, as he visits his patients at their own homes. Like the globule, the pilule may be taken into the mouth in its dry state, or dissolved in water and taken at once, or, if desired, in divided doses. In either of these modes it is equally suitable to children and grown-up people. It is peculiarly well adapted for dispensing. It consumes scarcely a fourth of the time of the ordinary modes of putting up medicine in powders, bottles, &c. All that we employ is a small shallow box,† resembling, in other respects, a common pill box, and a gummed label of directions to attach to the lid. This box, a little thicker than a penny-piece, is exceedingly convenient for transmission by post, and for the use of patients, especially men of business, who carry it in their waistcoat pocket, and are thus enabled to take a dose of medicine at any time of the day, without the trouble of mixing and measuring it, which they frequently complain of as very annoying, and often impracticable during business hours and away from home. To patients confined to bed it is also very convenient: placing the box under their pillow they can help themselves to medicine in the night or day time, and so, to

* Originally introduced into medical practice by Dr. Norton.—Eds.

† These boxes may be obtained of the pill-box makers, at about a shilling a gross.

a great extent, dispense with the constant attendance of a nurse.

On all these points we have taken care to ascertain the feeling of the homœopathic public. With one solitary exception, the expression of opinion has been loud in favour of the pilule. Even those who are well acquainted with, and have been long accustomed to, homœopathy, and have no want of confidence in the globule, prefer the pilule, as being calculated to do away with the strong prejudice which is felt against the globule.

But that which above all commends the pilule to our preference is its bulk. Without being too large to be perfectly available for all purposes, it is sufficiently large to convey a decided, intelligible, and credible dose of medicine. It does no violence to one's senses. It is something to be seen, felt, and handled, and makes no unreasonable demand upon the patient's faith to believe that it contains enough medicine to produce an effect. Finally, let it be observed, that this proposal to discard the globule entails no sacrifice of principle. It does not trench, in the remotest degree, upon the fundamental doctrines of homœopathy. It leaves untouched the vexed question of dose: the pilule, like the globule, will carry any dilution, from the highest to the lowest. He who prefers the tinctures only, can give the tinctures still; and he who delights in powders can equally indulge his taste. Our proposition stands simply and alone, as offering a substitute for the globule. Beyond this it interferes with no man's predilections.

It is easy to forsee that this proposition to abolish the globule, like all innovations, will have to encounter opposition. It is not difficult to anticipate some of the arguments that may be urged against it.

Some, tacitly, if not openly, will oppose it on the plea of habit. They have been used to the globule; it has answered their purpose sufficiently well; why should they change? There is no effectual answer to such objectors. Bacon has well observed, "Men's thoughts are much according to their inclinations; their discourse and speeches according to their

learning and infused opinions; but their *deeds* are after as they have been accustomed." There is, assuredly, no battle so hopeless as that which is waged by the force of words against force of habit.

Others will oppose it on the ground that it is best to let well alone. Homœopathy has spread with the globule, why, then, should we discard it? To this we reply, that homœopathy has spread, truly; but it has spread in spite of the globule: as truth will ever spread in the face of all hindrances. But we maintain that all is not well. It is not well when a great and useful scientific truth becomes a scoff and bye-word; and as rife a subject of family contention and heart-burning, as a difference of religious creed. Homœopathy is acknowledged by all who have tested it fairly, to be one of the greatest boons ever bestowed by a merciful Providence upon his creatures. Why is it, that, after the lapse of half a century, it is not more universally received? Mankind are not generally so slow to accept a benefit! We believe that the whole difficulty lies in the mischievous and unnecessary parade of the globule.

Others will accuse us of succumbing to popular opinion. And why not, when, as in the present case, the doing so involves not the slightest compromise of principle? We hold this to be sound wisdom; as we hold it to be the height of folly gratuitously, and for no good purpose, to place oneself in antagonism to popular opinion.

By others we shall be accused of want of respect to the memory and teaching of Hahnemann. To this we reply, that, whilst we yield to no one in our admiration of that great man, to whose genius we are indebted for the discovery and elaboration of a grand, simple, and comprehensive law of healing, we own it as no part of our allegiance to him to accept, blindly and unalterably, the particular mode and fashion which he adopted in the application of that law. Like all natural laws, this great law of homœopathy, though fixed and immutable in its principle, is, within its proper sphere, as variable in its adapation to man's wants, as the wants themselves. The law itself, the creation of infinite

wisdom, is perfect. The application of it, the work of man, ever imperfect, advances by slow and unequal steps *towards* that perfection which it never reaches. Hahnemann, possessed of the law of cure, was compelled to adopt *some* mode of administering it. He, unhappily, we think, selected the globule. Is the globule perfection?

Others, again, will adhere to the globule out of dread of the ridicule that might attend its abandonment. With these objectors we have no sympathy. Had we not been proof against the shafts of ridicule, we had remained an allopath to this day.

"Let the galled jade wince, our withers are unwrung."

It is not for ourselves, but for the sake of the noble science we practise, that we would remove all unnecessary cause of ridicule. Besides, we owe our opponents so little on the score of encouragement, whilst we have used the globule, that it should surely be a matter of supreme indifference to us, whether they laugh or cry at our relinquishment of it. They should be the deepest mourners at the death of the globule, seeing that such an event would disarm them of the keenest weapon wherewith they have opposed us.

It was a saying of the late Duke of Wellington, "that those who were good at excuses were seldom good at anything else." Leaving excuses to those who like to take shelter under them, let us follow the Duke's example, and enquire only, what is our duty? Keeping our eye steadily fixed upon this, such minor considerations as what this, that, or the other person may think, do, or say, will shrink into their proper insignificance.

Believing it to be not only a duty we owe to the public, to remove every obstacle that obstructs the spread of homœopathy, but also a duty we owe to our own dignity as the professors of a heaven-born art, to do all in our power to elevate and advance it, we call upon our professional brethren, themselves to discontinue, and to discountenance in others, the employment of a form of medicine, which is at once the stumbling-block and laughing-stock of homœopathy.

We are aware that the globule has for some time past been gradually falling into disuse, and that the pilule is by some medical men partially, and by others almost exclusively, employed. We know, also, that not an inconsiderable number of practitioners discard the globule in favour of the tincture. But, all this time, the globule is tacitly tolerated. Now, in a movement such as we have indicated, isolated effort is lost. To be effectual it must be active, general, simultaneous. The globule, short as has been its career, has taken such deep root, and its branches have spread so wide, that it will scarcely die of mere neglect. Like an ill weed, it will grow and flourish, though it be not cultivated. It is with this feeling that we have ventured to bring the subject more prominently under the notice of our colleagues: firmly convinced, that a calm consideration of it, backed by a careful testing of the practical advantages of the pilule, will not fail to bring those who differ from us round to the opinions we so strongly entertain, but, we fear, have but imperfectly expressed, in the foregoing remarks.

[We have for many years used pilules in the bulk of our practice, and seldom if ever prescribed globules except for infants. But for them they are decidedly preferable either to pilules or solutions. With this exception we should be glad to see globules finally abandoned to the other denizens of the nursery to share the tragical fate of Cock-Robin and be decently buried out of our sight like that eminent nursery hero.—Eds.]

REVIEWS.

Medical Despotism; or, Official Injustice. By the late Physician to the Crimean Railway Expedition. London, 1856.

The incidents of the drama unfolded in the above pamphlet are briefly these:—

The author, Dr. D. McConnell Reed, held the appointment of surgeon in one of the regiments of the Osmanli Irregular Cavalry, which in medical affairs, at least, seems to

have deserved its name. Whilst serving in this capacity, two foreign medical practitioners were appointed over the heads of the regimental surgeons, to the post of first-class surgeons. Dr. Reed and three of his fellow-surgeons, feeling aggrieved by these appointments, addressed a remonstrance in writing to the Major-general commanding the Irregular Cavalry. The only tangible ground of complaint they appear to have had against the appointments, seems to be founded on the notion that no medical officer can legally serve under the British crown unless possessed of a diploma from a British College of Surgeons, whereas the foreigners appointed possessed no British qualification. As for the other supposed grievance, that the agreement signed by the surgeons on entering the service limited the promotions to higher grades to the actual regimental surgeons, we cannot find anything in the paragraph * of the agreement referred to to justify the idea of any such limitation. We may therefore at once dismiss this ground of complaint as unreasonable. The major-general commanding refused to receive the remonstrance, on the ground that it was illegal.

Dr. Reed soon had an opportunity of giving practical effect to his notion of the illegality of the appointments complained of. He refused to receive orders from one of the new staff-surgeons, Dr. Kalazdy, and as a natural consequence was placed under military arrest.

General Smith advised Dr. Reed to apologize for his breach of military obedience, and to promise in future to obey all the lawful orders of his superior officers, on pain of being reported for insubordinate conduct. Dr. Reed acted on this advice in a very original manner. He wrote a long letter to General Smith, in which he apologizes for his offence, and promises amendment for the future in the following comical style: "I have the honor to say that I have now come to the deliberate conclusion, after mature

* "Promotions from surgeon to staff-surgeon, or from assistant-surgeon to surgeon, will be made on the recommendation of the inspector-general, merit and good conduct guiding the selection."

consideration, that it is prudent, under existing circumstances, to make a sacrifice of my personal feelings on this occasion, for the good of Her Majesty's service in this part of the world, and to say, *what I do not feel,* viz.: That I regret having refused to obey the order of Dr. Kalazdy, the staff-surgeon *for the time being;* and that I hope to be enabled, in future, to obey all the lawful orders on the part of my superior officers, whoever they may be, *if legally qualified and duly appointed to their offices by the proper authority.*"

The misfortune of this apology is, that the passages we have italicized completely neutralize the apology contained in the other words of this extract, and show that Dr. Reed was fully prepared to offer the same resistance to the orders of Dr. Kalazdy as before. Of course such an apology could not be accepted, and Dr. Reed was accordingly dismissed the service for displaying "an insubordinate and litigious spirit."

The next episode in this history is Dr. Reed's application to the War Office for pay as surgeon for three months subsequent to his dismissal from the service, and for reappointment to Her Majesty's service.

To this application he received a reply from Mr. F. Peel, stating that no pay could be allowed subsequently to the date of his dismissal, but that there would be no objection to his reappointment on a vacancy occurring, should General Smith apply for his restoration.

This General Smith refused to do; and thus it happened that Dr. Reed found himself irremediably shut out from Her Majesty's service.

Smarting under the mortification of hopeless dismissal, and the expenses incurred by his brief career as a military surgeon, Dr. Reed rushes into print. Like the soldier, poor and old, of Anna's wars, his loss of place and money

> "put the man in such a desperate mind,
> Between revenge, and grief, and hunger, joined
> Against the foe, himself, and all mankind,"

that he rails in good set terms against the War Department and the army generally, and Lord Panmure, Mr. Peel, General Smith, and others particularly. Besides the documents relating to the above affair, he gives us many others of an irrelevant character, to some of which we shall by-and-bye allude, all tending to the one object of making out that he is a most ill-used man. He finally appeals to public opinion and christian sympathy to give him funds to compensate him for the losses he has sustained.

Now, from the account we have given, the reader will not be able to discover anything in Dr. Reed's case to command much sympathy, christian or heathen. A regimental surgeon objects to obey the orders of his superior staff-surgeon, on the ground that the latter has been appointed illegally, in consequence of not being in possession of a British diploma, and when called upon to apologize, this regimental surgeon writes what we cannot but regard as a most insolent letter to the general in command of his brigade. He is justly and necessarily dismissed the service, but is promised a reappointment if his general will recommend him. This the general in question refuses to do, and our hero accordingly permanently loses his post and his pay from the date of his dismissal.

It is nowhere stated, nor does it appear, that any objection was made to the foreign gentlemen who were appointed to the post of staff-surgeons on the score of incompetence or want of education, therefore, in the absence of evidence to the contrary, we presume they had proper foreign qualifications and were competent medical officers. We have no sympathy for the narrow spirit that would object to the appointment of competent men, merely because they did not happen to possess British diplomas, while probably the diplomas they actually possessed were indicative of at least as good an education as that of their objectors. More especially does this pipe-clay exclusiveness ill become one like Dr. Reed, who elsewhere claims to be considered a civilian practitioner, and therefore not to be restrained within the narrow limits of military routine. It displayed, we think, singular bad taste to squabble

about appointments at such a time of war and disaster, when, by their ill-timed objections and refusals to obey orders, our countrymen might have produced much embarrassment to Government. Moreover it must be evident that the breach of discipline exhibited by Dr. Reed, in refusing to obey Dr. Kalazdy's orders, was totally subversive of the very first principles of the military system. It was precisely the same as if the colonel commanding a regiment had refused to obey the orders of his brigade-general because he considered the latter unjustly appointed to the command of the brigade. We need not point out the disastrous consequences of such behaviour in time of battle. Dismissal from the service is the least punishment that could be inflicted on such a breach of discipline. Supposing the government was technically wrong in the appointment of Dr. Kalazdy—which we are by no means sure of, for it appears to us to be contrary to common sense to imagine that the power that makes certain regulations for the regular service, should not be able to over-rule and set aside such regulations in the altogether exceptional case of organizing the subjects of an allied power as an irregular force—supposing the government to be technically wrong in the appointment, we repeat, it is clear that the subordinate was guilty of a gross breach of military discipline, in refusing obedience to his superior officer when once appointed. As General Smith justly observed to Dr. Reed, "you should have obeyed first, and complained afterwards."

Thus, in our opinion, Dr. Reed was wrong on every point. He was wrong morally, in the first place, in objecting to the appointment of a gentleman because he had only a foreign degree, while himself disclaiming the appellation of a military surgeon; he was wrong militarily, in refusing to receive orders from his superior officer; and he was wrong ethically, in tendering the sham apology he did.

Dr. Reed attempts to make out that he was unjustly, or at least hardly, dealt with, because on applying for reappointment he was refused, whereas another surgeon (Brown) who was dismissed at the same time, and for the same

alleged offence, viz.: displaying "an insubordinate and litigious spirit," was reappointed on the recommendation of the Medical Deputy Inspector-general and General Vivian. Now we are not informed what was the exact nature of Surgeon Brown's offence, nor if he aggravated the original offence by a sham apology such as Dr. Reed's, consequently we are not in a position to judge if the cases of the two dismissed surgeons are analogous. We find, however, in Dr. Reed's pamphlet a letter from Mr. Peel, holding out the promise of a reappointment if General Smith (the officer who dismissed Dr. Reed) would apply for his restoration, which, however, General Smith refused to do.

And now we come to the part of Dr. Reed's pamphlet, where he endeavours to make out that he was a martyr to the cause of homœopathy. He alleges that Dr. Cockburn, the Deputy Inspector general, applied for the restoration of the allopathic surgeon, Brown, but would not apply for the restoration of Dr. Reed, on account of his homœopathic tendencies. Now it nowhere appears in Dr. Reed's pamphlet that he ever asked Dr. Cockburn to apply for his restoration, nor does it appear that such application would have been successful, for Lord Panmure, through Mr. Peel, only holds out the prospect of a restoration on the application of General Smith; and this seems to have been Lord Panmure's final decision, for on a renewed solicitation for employment by Dr. Reed, he is referred by Lord Panmure to the previous communication.

Therefore there is, in our estimation, no ground for supposing that Dr. Reed's homœopathic tenets had anything to do with the refusal of the authorities to reappoint him.

There was, however, a bit of a squabble betwixt Drs. Cockburn and Reed on the subject of homœopathy, which, although it does not seem to us to be in any way connected with Dr. Reed's exclusion from the army, is not without interest for the homœopathic reader.

It appears that on the voyage to the Dardanelles, one of the surgeons of the irregular cavalry was affected with ague. Dr. Reed treated him homœopathically and he re-

covered. Dr. Reed wrote a minute account of the treatment he pursued, which, together with his report of his treatment of the soldiers in his regiment, fell into the hands of Dr. Cockburn, who thereupon addressed a letter to Dr. Reed, in which the following passages occur: "I observe that several of the medicines prescribed belong to those generally known as 'homœopathic medicines.'" "I have to request that in future no such remedies be employed." "I request you will receive this prohibition of homœopathic medicines as my authoritative desire."

To this interference of the Deputy Inspector-General with his practice Dr. Reed makes a very spirited and commendable reply, in a letter addressed to his Commanding Officer, General Beatson, from which we make the following extracts:—"Allow me to remark, that I consider any attempt on the part of the Deputy-Inspector General to interfere with the freedom of my practice as a regimental surgeon, or as an experienced civil practitioner employed for a time in this corps, is altogether uncalled for, and is quite opposed to the spirit of liberal enquiry which ought to characterize the acts of all enlightened practitioners of medicine and surgery in the present day." "I beg to assure you, that when I see fit to employ homœopathic medicines for the benefit of my patients in hospital or private practice, the *authoritative desire* of the Deputy Inspector-General will have no weight with me as a prohibition, unless it should appear in general orders, in which case the parties giving such orders will of course be responsible for the results."

With these sentiments and expressions of Dr. Reed we can cordially sympathize, and had his dismissal from the service been in any way referrible to this bold assertion of his right to practise according to his convictions, we should have hailed him as a worthy martyr to the sacred cause of homœopathy. It does not however appear that any further notice of Dr. Reed's peculiar mode of practice was taken by Dr. Cockburn, although six weeks elapsed from the date of the fulmination against homœopathy to that of Dr. Reed's refusal to receive orders from Dr. Kalazdy and consequent

arrest. So that Dr. Cockburn's letter was merely a *brutum fulmen*, displaying his animus against homœopathy, but doing no mischief, probably from lack of power.

It is rather amusing that this Dr. Cockburn, whose antecedents in connexion with a secret nostrum for cancer are sufficiently notorious, should display such a persecuting zeal against homœopathy. Probably he seeks to atone for his temporary secession from orthodoxy and to evince the sincerity of his repentance, by this display of intolerance towards the homœopathic heresy.

Our conclusion from a careful perusal of the documents published by Dr. Reed is, that he lost his appointment by his own fault. While he is to be pitied for the pecuniary distress this loss involved him in, his dismissal from the service is the more regrettable in consequence of the fine opportunity thereby lost of vindicating the right of a regimental surgeon to treat his patients according to his convictions, and of gaining for homœopathy a footing in the army. We must acknowledge that he made a good commencement in openly treating the soldiers under his care homœopathically, and in resisting the tyrannical interference of the Deputy Inspector-General, and we only regret that this promising career was cut short by his own mistaken notions of military discipline and professional dignity.

Die Therapie unserer Zeit. Von Dr. W. Stens. Sonderhausen, 1854.

The Therapeutics of Our Days. By Dr. W. Stens. Sonderhausen, 1854.

In the earlier history of Homœopathy, books having the scope and tendency of the work before us were much more frequent than now. It cannot however be said that they are even yet out of date, for as long as the majority of the profession remains unconverted, so long will propagandist works be required, and for each successive lustrum, at least, a new book by a new author will be advantageous. These books,

like many other things, spoil with the keeping, or we should rather say that they lose their power by age. We feel more disposed to place in the hands of the enquirer a work contemporaneous with himself than one equally good but of more ancient date. He turns up his nose at the ancient volume (ten years antiquates such books), but he will be more disposed to listen to an author fresh from the press. Therefore we are not of the opinion of those who contend that too many works explanatory of homœopathic principles have already been written. No doubt everything that could be said on the subject has already been said, and well said. Still there are various ways of saying the same good thing, and facts and doctrines that would be repugnant to some minds in one style are acceptable in another. We shall therefore never complain of the multitude of explanatory works on homœopathy, provided we do not observe a falling off in the matter and manner of these works. Each new book, if intrinsically good, has its new circle of readers, and makes its new converts, and thus fulfils the duty it was intended for.

What we would chiefly contend for in successive introductory works is a more and more critical spirit. Our authors should not be content with merely following Hahnemann in upsetting the old system and laying down dogmatically the tenets of the new: they should criticise Hahnemann himself, and if any of his doctrines will not stand the test of a rigorous logic, they should, without hesitation, be thrown over. As long as the great old man was alive, we could understand the feeling that prompted his disciples to eschew a searching enquiry into the truth of every maxim propounded by the master; but now that Hahnemann has passed into the domain of history, any delicacy with respect to the criticism of his tenets is entirely misplaced. The exponent of homœopathy must not rest content with merely enunciating the doctrines of Hahnemann, with giving as it were an epitome of the "Organon"; he must examine into the truth of every maxim propounded by the founder of homœopathy, and having proved all, must hold fast that

alone which is good—which stands the test of reason and experience. It makes a prettier book and reads better to set forth merely the system of Hahnemann, as laid down by himself, without cavil and without scepticism; or to give merely the indubitable, and, by his disciples, generally acknowledged principles of the system, slurring over or ignoring the disputed ones, than to enter upon a critical examination of the principles of homœopathy, as promulgated by Hahnemann with the view of determining how far they are well grounded, how far merely hypothetical. But the earnest student of medicine, the real seeker after truth, and above all the sceptical allopathic enquirer, will not be content to take anything for granted that is not distinctly proved by reason or experience; nor will the authority of a name avail much to make him swallow a theory repugnant to his own preconceived ideas, his prejudices and his education.

The above reflections are not out of place *apropos* of the book whose title is at the head of this article. The title itself would not indeed indicate that the work was necessarily an exposition of the homœopathic doctrine, even though we knew the author to be a homœopathic practitioner. "The Therapeutics of Our Days" would almost seem to imply that it was an account of all the different methods of treatment—and they are legion—practised in the present time. We should naturally have expected to read an account of the therapeutics of the ordinary practitioners, of the new physiological school—if they have any therapeutics at all—of the disciples of Hahnemann, of the followers of watery Priessnitz, of the partisans of arid Schroth, of the adherents of Mesmer, of the gymnasiarchs of Ling—if indeed there be more than one who can claim this title. We should have looked for an account of the hunger-cure, of the grape-cure, of the whey-cure, of the compressed-air-cure, of the oxygen-cure, of the galvano-chemical-cure, of the pine-leaf *(Fichten-nadel)* -cure, and of all and sundry the other "cures" that are rampant at the present moment. But little or nothing of all this do we find in Dr. Stens's book. It is in the form of letters, to whom addressed this deponent

sayeth not; possibly to the Archduke John of Austria, to whom the book is dedicated, were it not that the unknown correspondent is addressed in the second person singular, whereas a K.K. Archduke would never be addressed by a conscientious German otherwise than in the second person plural. An imperial royal highness, and all reigning powers in Germany, are invariably spoken to and of as pluralities, though in so doing the most flagrant outrages in grammar are often committed. However, there is no need to enquire who is Dr. Stens's imaginary correspondent, let us examine the letters themselves.

They are divided into two parts. The first or "negative" part consists of eight letters, and is devoted to an examination of the physiology, pathology, materia medica, and ordinary therapeutics of the old school. With this we need not concern ourselves, but proceed at once to the second or "positive" part, which we find to be devoted to an exposition of the homœopathic system. We shall do the author the justice to admit that this part of his work is written in a most attractive and eloquent manner, and is very pleasant reading indeed. But while we find much that it is interesting and valuable to know in these letters, we miss almost entirely everything like an attempt at a critical appreciation of Hahnemann's doctrines; and indeed the weak points of these doctrines are either not alluded to, or slurred over in the most cursory manner. Thus the eleventh letter is devoted to the consideration of the pathology of the homœopaths, but not a word do we find therein concerning the renowned psora-syphilis-sycosis theory. In the fifteenth letter the statements of Meyerhofer, with respect to his microscopical examination of the attenuations, are given without a word of caution as to the possibility of an error in the statement that particles of metallic triturations were observed in the 8th, 10th, and 14th attenuations; though, even accepting Meyerhofer's very marvellous calculations respecting the divisibility of metals in the mortar, the adept in Cocker could find some cogent arithmetical reasons for doubting the visibility, or even the presence of any of these particles in such high

attenuations. But this is a subject on which we shall not enter at this time. Probably in some future number when we have completed a series of experiments we have in view, we may return to it. Further, in the sixteenth letter we find the rather rash assertion that the homœopathic mortality in cholera is only 8½ per cent. Now we should rejoice very much were this the case, but alas! we know from sad experience that it is at least three times as high as here stated. And this is a fact so easily ascertained by reference to the statistics of homœopathists themselves, that we are surprised Dr. Stens has allowed such a flagrant exaggeration to damage the credibility of his other statements. We know very well the data on which the percentage of mortality he gives is founded, and we are well convinced of their utter untrustworthiness. How then, with perfectly reliable data as to the correct percentage of mortality in cholera under homœopathy at his hand, he could allow himself to put forward such an exaggeration, we are at a loss to imagine.

These are instances of the most uncritical spirit in which Dr. Stens has written his book. These, and similar faults of omission and commission disfigure a work which is otherwise extremely valuable, and as we have before remarked, written in a most attractive style.

Having said thus much in disparagement of Dr. Stens's labours, we shall now proceed to extract from his work some of the interesting statements and observations with which it abounds.

In illustration of the occasional necessity of being guided in our selection of remedies by symptoms, the necessary connexion of which with the disease is not apparent in the present state of our physiological and pathological knowledge, Dr. Stens gives the following examples.

"The first was a prosopalgia, which after careful investigation appeared to correspond precisely with the pathogenesis of *rhus*. Its administration relieved but did not cure. I made a fresh examination, and ascertained that the pain was very much aggravated by lying down and relieved by rising up. This led me to *ferrum*, which has this pecu-

liarity in its pathogenesis, and as in other respects its effects corresponded to the case before me, I gave it and the pain was permanently removed. In a case of coxalgia of nine months' duration which had resisted all sorts of allopathic remedies and baths, I gave *rhus* without effect. I re-examined the case and ascertained that the pain was aggravated enormously by standing, with the feeling as if the thigh would break through. This led me to *valeriana*, which has a similar coxalgia among its symptoms. A couple of doses of the 30th dilution effected a perfect cure in three days." (p. 142.)

We fear that such cures as those just given are rarer than they ought to be, in consequence of the imperfection of all our present repertories, which only give the separate elements of symptoms, but do not enable us to discover them with all their conditions and concomitants, as they appear in the materia medica. What we want is a repertory which shall allow us to discover, in a very short space of time, each symptom exactly as it stands in the proving. With such a repertory we should find cases like the above of much more frequent occurrence than they are at present.

As an example of the influence of the "epidemic constitution" on diseases of a sporadic character, and the advantage of attention to the possible effects of this influence in the treatment of disease, he gives the following case in point.

"I was treating a drunkard for delirium tremens. When he recovered from this disease he got a violent coxalgia, the paroxysms of which came on every morning about 4 o'clock. At that time cholerine was epidemic, and its exacerbations took place about the same hour. *Veratrum* was its specific remedy. This struck me, so finding that *veratrum* had in its pathogenesy just such a coxalgia, I judged that the coxalgia was owing to the *causa nocens* of the epidemic, which in one individual caused vomiting and purging, in another, vertigo, or confusion of head, with general prostration, and in this patient, attacked the weakest part, the nerves of the hip, causing a coxalgia with the peculiar characteristic of the epidemic. I should have mentioned that he had on former

occasions frequently suffered from coxalgia, so that the disposition to it was present. All these considerations induced me to select, not *nux vomica* which produces a similar coxalgia, and which was otherwise indicated by the mode of life of the patient, but *veratrum*, which had proved so useful during the epidemic. I gave a drop of the 9th dilution, after which he had no more pain." (p. 153.)

As examples of the rapid manner in which extremely painful diseases of long standing are sometimes cured by an infinitesimal dose of the appropriate homœopathic remedy, our author gives the following cases.

"A phlegmatic lachrymose lady had for several weeks suffered from the most violent face ache of a jerking, tearing character. She had a paroxysm every evening at 6 o'clock, which increased in intensity till midnight. The pain was aggravated by lying down and by heat, ameliorated by rising up and by cold. All imaginable remedies had been tried without avail; and as a last resource a homœopathist was called in. He gave a drop of the 9th dilution of *pulsatilla*, and the patient had no recurrence of the pain. Another patient had suffered for three months from the severest articular rheumatism. The joints were swollen, white, very sensitive to touch and movement, and during the last few days a very troublesome retention of urine had been present. All the appliances of the allopathic school had been resorted to in vain. In an agony of pain the patient sent for me at 7 o'clock one evening. I gave a drop of *bryonia* 9. The next morning I found him almost free from pain. During the night he had had a profuse flow of urine, and since then he had passed it freely and in normal quantity. In a week he was quite well." (p. 176.)

As instances of idiosyncrasies he gives the following, some of which will be new to our readers.

"Tissot relates of one of his friends that the smallest quantity of sugar made him vomit, even when he took it without knowing it. Dejean alludes to a man in whom honey acted as a poison whether swallowed or only applied to the skin. Whytt treated a woman who became sick by

the smallest portion of nutmeg brought into contact with her body. Eating quails causes in many individuals cramp in the legs; while larks cause cramp in the arms. Four sisters who before puberty liked strawberries very much and could take them with impunity, after the occurrence of the catamenia, could not eat them without getting erysipelas, swelling of the whole body, convulsions, roaring in the ears, and insensibility. The celebrated De Haen was thrown into convulsions if he ate half-a-dozen strawberries. I know two strong young men who an hour or two after eating a few strawberries become covered from head to foot with the most violent nettle-rash. Boyle says he knew a man who became ill every time he passed a coffee house. Gaubius knew a person in whom lemon-juice if applied to his hands even without his knowing it caused a shudder all through him. Magnus Ström speaks of a man in Leyden who when his eyes were bandaged and his hands put behind his back, could tell when a drop of lemon-juice fell on them, though he was unable to distinguish any other fluid. Autenrieth asserts that a piece of copper put on the hand excites in many the most serious symptoms, convulsions of the extensor muscles, &c. Gaubius knew persons who could not live in the vicinity of cherries. Mosthoff mentions the case of a child who was seized with the most violent nausea and vomiting from partaking of a single cherry. In nervous persons the vicinity of a cat or of a magnet often causes the most curious effects." (p. 185.)

In illustration of the power of small doses, our author cites among other things some experiments of Dr. Arnold with respect to the tetanus-producing power of strychnia on a frog. In these experiments Dr. Arnold seems to have anticipated Dr. Marshall Hall, in proposing the frog as a test for small quantities of strychnia.

"The 1000th part of a grain of strychnia caused tetanus in frogs, which lasted for some hours. In a frog which the day before had been made tetanic by the 1000th part of a grain, but had quite recovered, 1,000,000th part of a grain caused a slight recurrence of the tetanus, which after some hours terminated in death." (p. 203.)

Dr. Hirschel mentions an allopathic doctor who used to frighten his patients from homœopathy by telling them that those who were treated homœopathically turned green inside and putrified. Dr. Stens seems to have encountered a similar dealer in bugaboo tales to frighten his patients from homœopathy.

"A learned allopath endeavoured to frighten a lady, who was very particular about her skin, from homœopathy, by telling her that all who took homœopathic medicines turned quite black. This of course gave her a horror of such an infernal system. She had a liver complaint, and like many others similarly affected, she had a number of yellow spots on her face and rings round her eyes. For several years the sagacious disciple of Esculapius had employed all sorts of remedies, but in spite of all the disease had increased slowly, and the yellow colour threatened to supersede every trace of white. In the extremity of her despair she proved faithless to her prophet, and surrendered herself to the black art—homœopathy, and lo! in a few months that monster—her liver affection—with its yellow spots and rings was driven out by the more powerful homœopathic demon; but her face instead of assuming the threatened black, acquired the purest and most dazzling white colour. And as if they had changed parts, the allopathic doctor, when he saw the result of the homœopathic treatment, became yellow and jaundiced from spite, and so he has remained to this day in spite of the pure white light of the evident cure. But as well attempt to wash the negro white as to enlighten the wilfully blind."

We have given a sufficient number of extracts from Dr. Stens's work to show the style in which he has treated his subject. Our readers will see from the last extract that he does not always keep up to the mark of scientific gravity Indeed we cannot look upon the work as being addressed solely or even chiefly to the professional reader, but on the contrary, rather written for the intelligent non-professional, for whom indeed it is well adapted by its easy off-hand style, especially in the parts that treat of homœopathy. It does not come up to the scientific standard of the day, and is *therefore not* such a work as we should put into the hands of

the homœopathic student or the allopathic practitioner accustomed to exercise a severely critical spirit. For the intelligent, educated layman, and the ordinary allopathist utterly ignorant of homœopathy, Dr. Stens's work might be of use, as it is pleasant reading, and might serve to awaken an interest in homœopathy in such persons while explaining to them in a familiar and attractive style what it is. Perhaps such was Dr. Stens's object in the writing of it, if so, he has been perfectly successful.

Lectures on the Principles and Methods of Medical Observation and Research, for the use of advanced Students and junior Practitioners. By THOMAS LAYCOCK, M.D., &c., Professor of the practice of Physic and of Clinical Medicine in the University of Edinburgh. Black, Edinburgh, 1856.

It was incautious of the Patrons of the Edinburgh college to appoint as a successor to an Alison and a Gregory a provincial practitioner, whose only intercourse with an univer sity, as we learn from the Medical Directory, consisted in a traffic with Germany for the degree of M.D. which is appended to his name—it was rash of such a man within a year of his installation to justify the fears of his friends and the uncharitable hopes of his foes by publishing a book—but it was the consummation of folly to choose for his theme, not some small subject which he might competently have handled, but no less an one than the application of Logic to Medicine, in the treatment of which it was impossible for him to conceal his destitution of all elementary instruction in philosophy. His idea of the task he had undertaken may be derived from his opening paragraph. "When about to enter for the first time upon his duties as professor of clinical medicine, and to deliver the summer course of clinical lectures in the University of Edinburgh, the author looked about for some elementary work on the *inductive philosophy* which he could recommend to his class for their instruction and guidance in clinical obervation and research.

He found several sufficiently able manuals of *physical diagnosis* adapted to students; and good elementary works on the uses of the microscope, and on the *routine* of the clinical wards, with systematic instructions 'how and what to observe.' But he found none which instruct the medical student in a simple and easy form how to use his reason; none which explains to him in especial the nature of the mental processes by which knowledge is acquired in his particular sphere of labour; none which teaches him the applications to practical medicine of those aids to the intellectual powers which modern inductive philosophy uses so commonly and so efficiently. The student would enquire in vain for a short and practical exposition of the numerical method of research, in its special applications to practical medicine, or of that still more effective and philosophical method, the *analogical*," &c. &c. . . . . "It is quite true that numerous and well-written works on logic and mental philosophy are accessible to the medical in common with other students of science; but the medical student requires something more peculiarly adapted to his special need." Dr. Laycock thinks that, as there is a medical or dog-latin, so there should be a medical or dog-logic. His work is written in illustration of this belief, and anxious to be consistent, he has composed it in dog-grammar and according to rules of dog-syntax; for logic is the grammar of thought, as grammar is the logic of language. Here is an example taken almost at hazard (p. 92): "The characteristics of the functional activity indicate vital energy *are* below par." This is dog-grammar. "In the first place we must note that there are a number of agents, to speak *metaphorically*, which act from without." Where is the metaphor in speaking of agents acting? What can an agent do but act? "What you need, then, for the *acquisition* of this *intuitive* sagacity." (p. 52.) In ordinary logic intuitions and acquisitions are opposed terms. A few lines lower down we encounter this surprising announcement: "A single word may be read easily, although all the vowels be left out. We should like to try Dr. Laycock with one or two examples; suppose we write "f·l," does that mean fail,

or fowl, or foal, or feel, or file, or flow, or fly, or flea, or flaw, or fool? Will the new medical or dog-logic enable us to say? We lose all patience as we go on: how can there be a medical logic? Is not logic the science of the laws of thought, and the correct connexion of ideas? How is it possible to conceive any modification of this science in its application? If there is to be a medical logic there must also be a medical arithmetic, medical mathematics, and a medical poetry. This our author evidently believes, and he quotes:

> "Art is long, and time is fleeting,
> And our hearts, though stout and brave,
> Still, like muffled drums, are beating
> Funeral marches to the grave,"

as exhibiting "*a medical turn of thought*" in "a sweet transatlantic but English poet." That Longfellow is both transatlantic and English, means, we presume, that he was raised in New England; but what connexion these "funeral marches" have with medicine, except in so far as there may be supposed a compact between medical men and undertakers, we are at a loss to imagine.*

Here is a good specimen of dog-logic. "Now by removing the cause is meant simply, interrupting the order of the morbid phenomena, or breaking a link or links in the chain of causation." (p. 69.) For example, removing the cause of toothache is interrupting the morbid impression on its way to the sensorium by the appliction of some agent which paralyses the sentient nerves,—by no means the extraction of the decayed tooth. "*Tolle causam*" is dog-latin for "interrupt."

The medical or dog-logic discovers that an action can take place without an agent. Speaking of the colour of the skin in the disease termed "bronzed skin," he says, "by the way

* We commend to Dr. Laycock's attention the following medical turn of thought by a sweet Scotch but English novelist: "If the joint-stock company of undertakers shall unite with the medical faculty, as proposed by the late facetious Dr. G——, under the firm of 'Death and the Doctor,' the shareholder might contrive to secure to his heirs a handsome slice of his own death-bed and funeral expenses."—(Preface to *The Betrothed.*)

of exclusion we learn, temporarily, at least, that it is not due to effused blood, nor to colouring matters circulating with the blood, nor to chemical or *other agents.*" (p. 193.) We are rather at a loss to comprehend the meaning of temporary learning, but we should suspect a person to be labouring under temporary insanity who asserted that an action took place without an agent. But this we presume is one of the mysteries of medical logic.

Our author's use of words has certainly the claim to originality. Thus he talks about the "*viability* of the married officers" (p. 168), evidently meaning thereby the probable duration of their life. But *viability* means nothing of the sort, as Dr. Laycock may ascertain by asking his friend and patron Dr. Simpson, who will tell him that this word is not derived from *vita,* nor yet from *vie,* but from *via,* and that it is a term hitherto applied solely to the fœtus or new-born infant, and therefore to use it as Dr. Laycock has done is to betray ignorance unworthy of a third years' student.

Viability applied to officers in the army, could we imagine, only mean "ability to pay their way." In this sense the most "uncommon," (to use an Americanism) *viable* officer is a certain distinguished cavalry officer, who at the expense of we do not know how many thousands of pounds, rose in an incredibly short space of time from the rank of cornet to that of major-general. We direct the attention of army reformers to this admirable epithet. It might be a useful question at the military examinations now so much in vogue: "Define a viable officer?" Should the belligerent spirit shown by Dr. Laycock in his attacks on homœopathy ripen into a real military ardour, and lead him to seek an opportunity of making subjects for "funeral marches" with his sword, instead of as at present with his lancet, we fear he might be plucked at such a question by a board of military examiners, as he certainly would be by his friend Dr. Simpson, were he, as a candidate for a British degree, to be asked to define the meaning of *viability* as at present understood.

Defective as Dr. Laycock is in precision of thought and language, these faults sink into insignificance compared to

his outrages against taste and all medical proprieties; for although there can be no medical logic, there may be an appropriate medical demeanour. It is hardly credible that the successor of the gentle and good and considerate and patient Alison, should direct his pupils to perpetrate, as a rule in their practice, the vulgar joke ascribed to the coarse Abernethy. Here it is: "*if they* (patients) *become wearisome and prolix, they can be readily stopped by asking them to shew the tongue.*" And this is the conduct inculcated upon the rough and impatient youths who constitute the bulk of Dr. Laycock's audience! We really do not know whether this is worse than the following theft from the observations of the immortal *Jeames* of yellow-plush-celebrity. "The patient will perhaps offer you his hand. . . . The manner in which the hand is offered will tell you something of the mental character of the man you have to deal with, while its condition will equally tell you something of his past habits and occupations. There is the rough hand of manual labour; the soft hand of the shopkeeper or merchant; *the graceful hand of the gentleman-born.*" No, no, Dr. Laycock, be candid and tell your pupils next year that the only infallible test of the true "gentleman-born," is a hard round elevation on the palm, "metaphorically" called a guinea, (alas! it is often only a sovereign) which may be distinctly felt when you bid your patient farewell, and which you are expected skilfully to remove with a certain half conscious expression of acknowledgment. For a fee is logically an accident; in medical logic a happy accident.

It would have been strange if an author so destitute of logic, grammar and taste, had not made a series of clumsy obeisances to Dr. Simpson, (through whose influence he is supposed to have been intruded upon the University), and if these obeisances had not taken the form of vituperating a system of medicine, practised by one of his ablest colleagues, and of which he himself was not only ignorant, but which he was incapable of estimating from his intuitive and acquired deficiencies.

The following quotations will illustrate the author's knowledge of the system he never tires of abusing.

"Methods of cure dependent on one or two falsely called principles *must* be erroneous. How absurd the therapeutical dogma of *similia similibus curantur* appears from this point of view. No diseased individual is exactly like another individual; nor, in the same, is the condition of one day like the condition of another." (p. 23.) This passage reveals the author's idea of the principles on which homœopathy depends, viz: that diseased individuals are exactly alike, and that the condition of a diseased individual is every day alike. In what homœopathic work he ever saw anything of the kind asserted he does not tell us, and our readers have no need to be told by us that these so-called principles on which Dr. Laycock believes homœopathy to depend, have no existence except in his own distempered imagination.

Again: "All kinds of false systems of medicine manifest therapeutical theories and fallacies. Homœopathy, hydropathy and mesmerism are the three principal of modern times. Homœopathy has for its basis two dogmas, the one to which it owes its name of *similia similibus curantur*, I have already noticed;* the other is, that infinitesimally small doses of drugs powerfully influence the vital functions. Let us touch this dogma with our Ithuriel's spear † of experience, and ascertain, in the first instance, whether the infinitesimal dose be administered. The process by which the dose is obtained is theoretically one of minute division and subdivision; but is it really such? What is the proof that the theoretical subdivision into infinitesimally minute fragments, or portions, takes place? There is no proof. It is simply an assumption, founded on another assumption, that the particles so treated are capable of infinitesimal subdivision. But does this assumption correspond with the fact? Various plausible arguments only are brought forward in support of it, chiefly from analogy; but these are of so vague and erro-

* With what correctness our readers have had an opportunity of judging.

† Had this been published twenty years ago, we should have had a caricature of a professor "touching a dog(ma) with Ithuriel's spear" in the medical *Punch* of that day, called the *Maga*.

neous a character, that they need hardly be mentioned; as, for example, it is alleged that odorous bodies *must* give off infinitesimally small particles, inasmuch as they manifest no appreciable diminution of weight after many years. But is it not a more reasonable inference, that, in the particular instances mentioned, the odour is not at all dependent upon particles given off from the odorous body? Were it otherwise, they would at last show a sensible, although a very small, diminution in weight. And even if the argument be allowed as to odorous bodies, how can it apply to the inodorous, as chalk, charcoal, bichloride of mercury? When, in addition to the teachings of experience, we have facts as to the atomic constitution of bodies, which imply limits to the divisibility of matter, we may well feel justified in rejecting the whole system of medicinal therapeutics founded upon the infinitesimal hypothesis, because wanting in the primary fact that an infinitesimal dose is administered." (p. 25.)

In the whole course of our experience of allopathic arguments against homœopathy, we do not remember to have yet met with anything more hopelessly absurd than the above. Homœopathy has not two dogmas for its basis, as here alleged. Its formula, *similia similibus curantur*, is not in the slightest degree what Dr. Laycock supposes it to be. It is not a dogma of homœopathy that infinitesimal doses of drugs powerfully influence the vital functions. This may just as well be called a dogma of allopathy; for if we take up any allopathic work on materia medica we shall find the "dogma" that inappreciably small quantities of drugs often produce violent effects, and instances given of serious symptoms having been produced by the mere smelling of certain drugs, as musk, ipecacuanha. He seeks to discredit the possibility of the minute subdivision of medicines, by asserting that it is a mere theory or assumption supported by arguments chiefly from analogy, and yet his whole book is a eulogy of theory in medicine and of the analogical method of research. "To theory," he says repeatedly, "we owe all *true* progress in medicine." If the odour exhaled by odorous bodies do not depend on particles given off from

them, on what does it "more reasonably" depend, Dr. Laycock? And why may not the argument be applied from odorous substances to inodorous by your favorite method of analogy? Is there less analogy betwixt the almost infinite subdivision of matter apparent in an odorous body and that in a soluble body, than between the patches of discoloration on the tongue and mucous membrane of the mouth in "bronzed skin" and those existing naturally on the same parts of some birds and beasts, which Dr. Laycock brings forward as a striking instance of the advantage of the analogical method? (*vide* p. 196.) Why Dr. Laycock's analogical method, if carried out as he proposes, would discover an analogy betwixt a case of cyanosis and a blue-bottle fly. His argument about odorous bodies not giving off particles goes against himself; for if substances produce a sensation, *i.e.* a sensible change in the nervous system, without bodily presence in any form whatever, which odorous substances must do unless they give off *something*, then homœopathic medicines, even were they proved to contain nothing, might also produce a change in the nervous system, and through it on the whole economy. This, of course, is not our view of the matter, but it is a legitimate deduction from the premises, if we admit the statements and rules for analogical research of this learned professor. What facts as to the atomic constitution of bodies there are which imply limits to the divisibility of matter our author does not inform us. Hitherto we have always heard of the "atomic *theory*"; but the atom, or indivisible thing, has always been a mere hypothesis of the chemists. But for Dr. Laycock, when it suits his purpose, theories become facts, and facts the best proven mere theories. It is evident that by "atom" he has always been accustomed to signify merely "a small quantity," as the word is popularly used when one says—there is not an *atom* of sugar in a cup of tea, or an *atom* of sense in the book under our notice. He has certainly never realised the only scientific or philosophical use of the term, as designating a mental conception of an indivisible point of force. Had he done so, it is plain he never could have seen any opposition

to the atomic theory in the minute division of particles, whether by trituration or solution. Our readers do not need to be told, but Dr. Laycock does, that homœopathy is not founded on the infinitesimal hypothesis, but may be practised and proved without the employment of infinitesimals at all.

Dr. Laycock returns again and again to the charge against homœopathy, but only to shew his utter ignorance of what the system is he is attacking. Thus, at p. 134, he takes the homœopathic provings as illustrating the influence of suggestion and expectation. After asserting that it is "amongst the established truths of mental physiology, that ideas may become realities without the co-operation of the consciousness," which is about as true as though one should say, "that words may become things without the co-operation of Nostradamus"; he proceeds to tell his pupils how our provings are made. "The 'prover,'" he says, "takes, as he believes, an infinitely minute dose of a supposed medicinal agent (but, more probably, no portion whatever of it), and then mentally watches, or listens, or feels, as it were, with his attention, for the results that have been suggested to him by theory or otherwise." Now, all our readers know, though Dr. Laycock does not, that our provings have almost all been made with large and oft-repeated doses of drugs, and that the provers were generally left in ignorance of what they were taking, in order to prevent the occurrence of "fallacy from the influence of suggestion and expectation."

Again: "A change of habits of life, of diet, or of regimen, in homœopathic treatment, is equally efficacious with or without globulistic medicaments." By "globulistic medicaments" is meant, we presume, homœopathic medicines, and if so, we should like to know how homœopathic treatment is possible without homœopathic medicines, and where Dr. Laycock, who is such an inveigher against false theories and assumptions, has witnessed or read of such non-medicinal homœopathic treatment.

But we need not further expose Dr. Laycock's utter

ignorance of the system of medicine on which he pronounces so dogmatically, and which he condemns so unreservedly. He reminds us, in his attacks on homœopathy, of those witches of old, who, when they wished to injure anyone they had a spite against, made a figure of wax, on which they inflicted frightful wounds and gashes. It was necessary, however, in order that this witchcraft should be effectual, that the artificial figure should resemble the victim. But we are unable to trace the slightest likeness to homœopathy in the object of Dr. Laycock's vengeance, and so we may anticipate that his sorcery will be as potent as the following apocalyptic effort is edifying and intelligible.

"It is often asserted and lamented," he writes, "that medicine has no such great principle—[as that of gravity in astronomy]—no great primary FACT to which all theories and researches shall point, and by which they all shall be guided. . . . . I demur to these views altogether. I not only am satisfied that medicine has, like other sciences, its great primary fact or principle, but I can speak positively, because from experience, as to its value and uses." Well, and what is this great primary FACT, which Dr. Laycock finds deserving of capital letters? Here it is: "The primary or fundamental principle of life is the unity of structure and function of organisms both in time and space. This, then," he proceeds, "is the point to which all your theories should tend, the principle by which they should all be regulated. This should be ever present to your thoughts, this should ever guide your observations. Thus used, it is the bond that will bind science, and observation, and tact together, and confer upon you the highest qualities of the practitioner, namely, the power to take profound philosophical views, and the ability to apply those views to the practice of your art. The principle thus announced will doubtless be severely questioned, and its truth controverted, but it will finally be almost universally accepted." (p. 181.) "This great principle," he further says, "ought to be alike the basis and the climax of your theories, but it need not by any means be the starting point of all." We presume this to be a specimen of

Dr. Laycock's way of "speaking metaphorically," but a metaphor that includes a basis, a climax and a starting point, reminds us strongly of the metaphor of the Hibernian orator, "I smell a rat, I see it brewing in the storm, but I will crush it in the bud."

However, to return to this great principle of medicine—we search through the remainder of the work to endeavour to find its application to therapeutics. But in vain. This professor of the Practice of Medicine and of Clinical Medicine, makes no allusion to the application of his wonderful discovery of the great primary FACT to therapeutics. The remainder of the book is occupied with the supposed bearing of this FACT upon comparative anatomy and physiology, healthy and morbid, but it is not insinuated that it can be of the slightest use to therapeutics. Indeed, he previously (p.140,) gives his notion of "the only mode in which thorough tact in the handling of medicinal agents can be acquired." Here it is:—"You should take some well-established medicinal agent and method of treatment, and observe well and closely its *modus operandi* in every form of morbid action to which it is applicable; noting its action when variously administered as to quantity or dose, or combination with other means or drugs." And the medicines he particularly indicates as desirable to subject to such observations are—"mercury, lead, opium, ipecacuan, colchicum; the iodides, bromides and haloid salts generally; the great group of terebinthinates; quinine, salicine, and the allied vegetable principles; the purgative gum resins; the astringent vegetable principles, and the like." [What are the like?]. In endeavouring to carry into effect this advice we can imagine the zealous student proceeding to try this list of medicines one by one on every disease he meets with; "to which it is applicable," says Dr. Laycock, but he does not inform us how we are to ascertain what diseases a medicine is applicable to before trying it on all: the great primary FACT in medicine throws, alas! no light on the subject. Well, fancy our zealous student commencing his experiments on his patients.

But softly—hear Dr. Laycock two pages further on: "Practical medicine," he alleges, "does not permit experiments to be made upon patients" (p. 143). Poor student! what are you to do? In one place your professor of medicine tells you that the only mode of acquiring tact in the handling of medicinal agents is to perform experiments on patients, and having thus revealed the only true mode, he forbids him to employ it. Thus Dr. Laycock, like the wine of the drunken porter in *Macbeth,* "may be said to be an equivocator *with his disciple;* he makes him and he mars him; he sets him on and he takes him off; he persuades him and disheartens him; makes him stand to and not stand to; in conclusion equivocates him *in a mist,* and, giving him the lie, leaves him."

We had marked some dozen more passages in Dr. Laycock's short work, with the intention of exposing their absurdity, but we have already devoted to it more space than we intended, and our readers would not thank us for taking up their time and attention longer with a work so unworthy of a well-educated physician of the present day, let alone a professor of the time-honoured University of Edinburgh. We can have little difficulty in believing the assertion of the *Times* as to the decline of learning in the northern capital, when we see the chair of the Cullens, the Gregorys, the Homes, and the Alisons occupied by its present possessor.

In fine, we cannot congratulate the Edinburgh University on this her latest medical acquisition. Dr. Laycock, to judge from the work before us, might have made a very respectable demonstrator of anatomy or even distinguished himself in some special department of physiological inquiry, but for the chair of Practice of Medicine he is most unfitted. His knowledge of the actual state of therapeutics is on a par with that of a country apothecary; his grammar is a bold defiance of Lindley Murray; his logic is enough to scare the ghost of Sir William Hamilton, if he still lingers in spirit amid the scenes of his former triumphs; and if we may judge by his singular mode of spelling the familiar name of Goethe, we

we suspect his German would not pass muster at his alma mater,

"the U-
Niversity of Göttingen."

And yet of such stuff is made the therapeutic instructor of the rising medical generation, the eulogist of Simpson, the censor of Hahnemann, and the sneerer at Henderson!

External Remedies for Accidents, by H. Thomas, M.D. Thomas, Chester. 1856.

This is a pretty little book, containing all that it is needful for the amateur doctor to know concerning the external use of arnica, calendula, cantharides, ledum, ruta and rhus toxicodendron. It is illustrated with very pretty coloured representations of the plants above named, which however, as Mr. Primrose's critic would have said, "might have been better if the artist had taken more pains." Thus the racemes of rhus are not indifferently axillary or lateral, as represented "from nature" by Dr. Thomas, nor is the root of arnica of a grass green hue either in nature or in Dr. Hamilton's Flora Homœopathica, from which Dr. Thomas's picture has been, if not precisely *copied,* at all events *compiled,* though not very happily, as it appears to us.

OBITUARY.

Samuel Brown.

Those who knew him, and those who did not, will be equally disappointed by every biography, be it full or be it brief, of Samuel Brown. No description can justify to the one, or explain to the other, the admiration he excited. The reason is not far to seek. Biography is a branch of history, and history occupies itself with actualities and not with possibilities: it is the chronicle of success: it leaves to the orator and the poet to build a shrine to the nameless demigods, out of whose fall the hero rises to glory and a deathless name. While the intellect bows submissive to this inexorable decree of fate, and concedes that history must follow the career of deeds without pausing to tell of efforts, yet there is a craving in the

depths of our being to have some memento of those who have exercised a powerful influence upon us, some record of the talisman that bound by its spell so many and such various characters. That Samuel Brown possessed this talisman, will appear from the merest outline of the story of his life.

He was born at Haddington the 23rd February, 1817. His father was a small merchant, the son of a dissenting minister, John Brown, the author of a well known commentary on the Bible which bears his name. He was educated at the grammar school of his native borough, and studied medicine at Edinburgh, where in the year 1833 he attended Dr. Hope's lectures on chemistry, "and (to use his own words) from that (to me) memorable session I was sworn a chemist." In 1837 he read a paper before the Society of Arts on the mucilage of the fuci: this was published in the Edinburgh Philosophical Journal; he was then only 20 years old. In 1839 he read before the British Association a paper on the crystallization of insoluble and infusible carburets, and obtained for this the annual medal of the Hunterian Society; in the same year he obtained the gold medal of the Medical Faculty of the University for his thesis on the coagulation of albumen and catalysis; in 1841 he read before the Royal Society a paper on the preparation of paracyanogen in large quantities, and on the isomerism of cyanogen and paracyanogen; and finally in the same year before the Royal Society he read his celebrated essay entitled, "Experimental researches on the production of silicon from paracyanogen," in which the process was described of transmuting, as he alleged, carbon into silicon. Had this announcement been made by a mere speculator upon chemistry, or a novice, it would hardly have been deemed worthy of refutation, but Samuel Brown was no such man. Even in 1839, Dr. Traill, Professor of Medical Jurisprudence, had from personal acquaintance, borne evidence to his intimate knowledge of the higher branches of chemical science. Dr. George Wilson, the accomplished Professor of Technology in Edinburgh University—himself recognised as a first rate chemist—writing in 1843 of Samuel Brown, says, "for the last eight or ten years he has devoted his attention almost entirely to the study of chemistry. He brought great natural gifts to the task, had leisure to apply them to advantage, and neglected I believe no source of information. . . . The greater part of the last four years has been spent by him in his laboratory in the prosecution of experimental researches, and he has acquired in the

course of these, great experience and dexterity as a manipulator." Can we wonder that an ambassador so accredited coming from regions altogether unknown to us, but familiar to him, and insisting with all the fervour of a sort of scientific inspiration, not only on the actuality of the facts, but on their theoretical necessity, should obtain belief? All agreed that if any youth of his day was to win his way to the secrets of nature, none was so qualified as Samuel Brown; and when we saw him retire into seclusion and live like a hermit, sleeping in a hammock in his laboratory, living on the most meagre food, stinting himself of everything; this bright youth caressed by all who knew him, whom all were glad to entice from his lonely and miserable laboratory to the best of cheer and society, when we saw him thus wrapt in his discoveries, was there any credulity on our part in giving him our fullest faith? Of his province, chemistry, we knew nothing compared to his knowledge. Of himself what did we know? Why we knew that in 1843 he delivered a course of four lectures on the atomic theory, and that the opinion of his audience was thus expressed in a memorial written by the late Sir William Hamilton, who was certainly a most competent judge of the intellect displayed in them. "We would record our admiration of the genius, eloquence, and learning which pervaded the exposition of your large and philosophical views of the principles of chemistry, as well as your elegant, simple, and precise experimental illustrations of isomerism. We are aware that not having ourselves made a careful repetition of your experiments, we are not entitled to offer any opinion with regard to their accuracy; but from the simplicity of the processes you described as well as from the rigid and critical character of your reasonings, we cannot but indulge a confident hope that future investigations will end in the confirmation of your discoveries. These discoveries appear to us to be not only most important in themselves, but to possess an especial claim to attention, from having been made under the guidance of an original and comprehensive view of atomics, on which you have bestowed much thought and laborious investigation, and which if established as a general principle, must tend materially to change the whole aspect of chemistry." This address was signed by Sir William Hamilton, professor of logic, Dr. Chalmers, the great divine, Mr. Goodsir, now professor of anatomy, Dr. A. Thomson, professor of physiology, Dr. Davy, the well known chemist, brother of Sir Humphrey, and many other names of celebrity in various departments of high

intellectual attainment. This happened in May 1843. The following September he offered himself as a candidate for the chair of Chemistry in the university, vacant by the death of Dr. Hope. He founded his claims almost entirely upon his great discoveries, but at the same time presented testimonials of his scientific attainments and his general talents. To the latter some of the most eminent men of the day bore emphatic testimony. Archdeacon Hare, the author of "The Victory of Faith," "Guesses at Truth," &c., thus writes to him. "There is a philosophical power of looking into the heart of things and discerning their inmost relations, which is the highest faculty for all speculation, whether its object be the outward world, or the moral and spiritual nature of man. . . . .The writings of yours with which I am acquainted, have seemed to me to betoken that you do possess the power of philosophic intuition in a degree in which it is possessed by very few Britons of our age." Thomas Carlyle writes, "I can at all times with great readiness testify that I have found in him a man of vivid penetrating, high aiming, hopeful nature; full of ardour, of discernment, and veracity; a singular acuteness as well as vigour of intelligence, prompt invention, clearness, swift precision, nay, brilliancy and general felicity of utterance,—the elements in short of a truly gifted man, to whom scientific or other triumphs, if circumstances proved not too unfavourable, were very possible, were very probable." Thus backed by Carlyle, Hare, Jeffery, Hamilton, Chalmers, and many more celebrities, Samuel Brown had very nearly got the chair, and it was the opinion of his friends that if he had rested his title on his general and scientific capabilities, and not upon his discoveries, he would have succeeded. The contest was keen, and he retired, although beaten, with high honours.

The following May, 1844, he thus wrote of it to a friend. "My thoughts and feelings about Chalmers' noble letter, and Mackdougall's* noble exertions, I shall tell you better than I could put them down on paper. I tell you I would not this poor day give that letter of our Scottish hero of 1800-50; that other of Carlyle's, the British chief of the same period; that of Emerson, the prophet of young America; the unsought enthusiasm of Macdougall, the man of Edinbro' of this year; the indignation of Sir William Hamilton; the erudition of Edinburgh and Oxford in one extravagant, magnificent

* Professor of Moral Philosophy in the University of Edinburgh.

head; the approving hope of Hare, the apostle of faith, illustrated by understanding, in the majestic church of England; the life of love given me without reserve by Archibald Craig, the acute and fervid angel of my studious toils; the kindly admiration of your well-beloved self, Drysdale, Ross, Simpson, Giraud, and a few more, with Ruffini, the still centre figure of the blessed group; and last, far from least, the judicious smile of our keen and graceful Jeffery,* for an earldom and broad acres to boot, not to say a paltry chair even in the alma mater of my yearning youth." This was a proud moment; by sheer talent he had at the age of 26 years won for himself the interest and admiration of the foremost men of his day. We look upon it as the culminating point of his career. Up to this time he was the heir apparent to the crown of science; he claimed the throne as his due; had his claims been allowed, he would have reigned right royally, for he was of a glorious nature; but his claims were not admitted, they were protested against by the whole hierarchy of chemistry, he was looked upon by them as a pretender, and his life was wasted away in one long miserable effort to vindicate what he to the last maintained to be his legitimate position.

This most gifted and most sensitive of men who seemed made to conquer, to whom all things were possible, had he not pledged his life to the impossible, was doomed to endure from 1843 to 1856 all the mortifications that envelope the career of a pretender. What he must have suffered, no mortal can tell, and whether to the last he was sustained by confidence in his discoveries, or whether he adhered to them out of a dogged resolution and a fixed belief that for him there was no choice but to succeed or die, it is hard to say. Those most in his confidence, and who ought to know best, maintain his entire faith in himself to the last; but long before he was released by death, his frame had been wasted away by a painful disease of the intestines, which for the last ten years of his life had impaired his health to such a degree as to make all work difficult and uncertain for him. This sad fact we must not forget in estimating his achievements. He was wounded early in his day of battle, but for this, who shall say what he might not have accomplished?

It was at the time of his fullest vigour, in 1843, that he wrote the article entitled "A Theory of Small Doses," which first appeared in the third number of this Journal, and afterwards in the "Introduction to the Study of Homœopathy." His interest in homœopathy took its rise in Dr. Black's conversion to it. Dr. Black and Samuel

* Of the Edinburgh Review.

Brown were fellow students, and presidents the same year of the Hunterian Society. Dr. Black had distinguished himself during his academical career by his zeal and talents, and when it was announced among his old friends that he had fallen into the delusion of homœopathy, there was a wild wail of despair over the fallen star. A common friend wrote Samuel Brown a chapter of lamentations upon the occasion. It was not his way however to take part in clamour, and so he got Hahnemann's Organon and read it through before replying to this friend. He then wrote, that so far from seeing anything absurd in homœopathy, it appeared to him a method of great beauty and probable truth, and that he found in the Organon of its discoverer, the indications of a profound genius, and ended by strongly urging upon his friend the duty of mastering the system he thus unphilosophically denounced. From that time Samuel Brown never ceased to take a lively interest in homœopathy; he was familiar with most of the English treatises upon it, and did great service to the cause by his eloquent orations at medical societies, and by popular and scientific articles, which appeared in various periodicals, and to the last he submitted himself and his family to the treatment of homœopathic physicians with unwavering faith.

We would gladly linger over this exulting and abounding period of his career; but the world's pitiless sentence *væ victis* had been pronounced, and he began to die. His doom took long to execute, but it was fixed from the first; he was often reprieved, but the law of failure took its course. Those who knew him well can recall the fatal changes which had then commenced to develope the deadly malady under which he finally sunk. He grew restless: he went to Glasgow for two years, and lived in his laboratory there, then he returned to Edinburgh, then he went Haddington, again he came back to Edinburgh, and married and settled at Portobello. To the casual observer, or those who only knew him in society, there was nothing to excite suspicion of unhappiness or disappointment about him. He entered like a beam of light, there was a glowing ardour in his looks, his words, his movements, that seemed to spring from excess of life. On every topic that was named in his presence, whether grave or gay, scientific, literary or artistic, he seemed equally at home; he did not sink to the level of a petty theme, nor did he let it go by as beneath his notice, he laid hold of it in his own onderful way, and bore it up to his region of beautiful speculation, then he transfigured it into a glorious apparition. No wonder

he believed in transmutation, he had himself the gift, he could transmute the basest lead into the finest gold by the subtle fire of his intellect and the magic of his tongue! Perhaps in his power of exquisite talk, which for variety, fluency, freshness, and depth, excelled the improvised talk of any man we ever heard of, not to say listened to, there lurked the snare that worked his final failure. He could set all things to rights; the most chaotic materials grew into a kosmos in his hands; he perceived with such rapidity the points of approximation between the most dissimilar appearances, that all he had to do was to arrange them, and pass lightly over the intervals, and behold there was a chain of endless extension! The links were wanting here and there, but still we saw where they ought to be, and when this chain was electrified by his fervid manner, who could coldly handle it, detect, and demonstrate the gaps? Thus unconsciously he may have answered for nature instead of questioning her; did he mistake the echo of his own voice for her reply? By and bye was he not somewhat decoyed from crucibles, weights, and measures, and all the weary work of unsuccessful experimentation, to the world of imagination, where instead of himself transmuting he was transmuted? He seemed to lose the primary essential hold upon facts, and left the pursuit to which he had vowed his life, neither willingly nor altogether consciously, but by a dire necessity, because he could not go back nor get forward, and dallied with literature. Here too he failed, not because he had not greater talents and knowledge than those who outstripped him in the race, but because he was half-hearted in it. It was only his by-play, he scorned it, and scorned himself for doing it;—it was not meet that the heir apparent should keep a huckster's shop; he resented the indignity that he conceived he submitted to; thus like a man on double business bent, unable to decide for either, he half did both. Yet some of his writings are very beautiful, but they appear absolute failures to those who had heard him speak; the glow-worm by daylight is not more inferior to the exquisite phosphorescence as seen at night, than are Samuel Brown's best literary efforts as compared to his brilliant talk. This appears to us the saddest part of the whole affair. He has passed away, he, the gifted, the wise, the learned, the eloquent, has passed and left nothing;—nothing but a life-long influence upon those who knew him, an influence for which doubtless they will be held accountable, as for one of their highest privileges. "We shall seldom meet," he wrote to a friend, "one another now. Let each see that the other has grown

when we do meet. To be stronger and freer, in a word to be manlier! and manlier every year be now the common object of our unenvious emulation. I challenge you to the generous combat."

Let us accept the noble challenge, and expect the meeting, humbly committing the time and place to Him who is the beginning and end of the career of all his creatures. To Him too, let us commend the faithful partner of poor Samuel Brown, who did all that woman could to mitigate the unutterable sorrows and sufferings of his long long death.

MISCELLANEOUS.

A Return to Nature.

One of the boasts of modern physic is that, in place of administering the crude drug such as nature offers it in the vegetable, animal, and mineral kingdoms, by the aid of chemistry it extracts the active principle from the mass of inactive ingredients in which it is naturally enveloped, and gives this in the form of some delicate crystal or other elegant pharmaceutical preparation. It is chiefly in respect to vegetable medicines that this chemical dilettantism prevails. The physician rejoices when his chemical familiar succeeds in eliminating from a favourite drug some beautiful crystalline substance, which the chemist declares to be the essential principle of that drug. Forthwith the accredited natural medicine is discarded, and then nothing will satisfy the physician but this its supposed active principle, which his patients must now swallow regardless of cost—for in all these cases the cost of preparing the "active principle" is enormous. Our modern doctors now scorn to prescribe bark, belladonna, foxglove, opium, nux vomica, veratrum, and monkshood; these simples of our simple forefathers are abandoned for quinine, atropine, digitaline, morphine, strychnine, veratrine, aconitine. A colourless crystal is no doubt a prettier object than a black, brown, or yellow extract or tincture, and thus the pill is gilded to the patient who can pay for the gilding. But confessedly the chemist's retort and evaporating dish have not added to our knowledge of the curative powers of the drugs, and it may be a question whether while centupling their price the chemist has not actually diminished the therapeutic value of our aditional medicines. Of all the drugs that have been depurated by chemist, cinchona bark was surely the one on which his skill, by

the unanimous consent of the faculty, had been most successfully exercised. The tiny pinch of silky quinine which the chemist offered to us (for a consideration) as the *active principle* of our pounds of good and cheap yellow bark, was generally allowed to contain all the virtues of the larger mass of crude wood whence it was extracted. If some hard-headed, old-school doctors refused to abandon the parent drug, and looked distrustfully on its elegant offspring, their behaviour was attributed to old-fashioned prejudice and antiquated dislike of novelty. Of late, however, mild doubts have occasionally been timidly expressed by correspondents of our medical journals and others, relative to the pretended perfection of the representation of the curative virtues of bark by quinine. Whilst some have returned to the primitive drug, others have entreated the chemists to examine anew the caput mortuum remaining after the extraction of the quinine, to see if haply some other active principle might not be found that would supply the missing virtues in quinine, in other words, restore to the expensive manufactured article the curative powers of the comparatively cheap raw material. The chemists nothing loth, raked away among the refuse of their quinine, and brought up successively, cinchonine, quinoidine or chinoidine, quinoiline, amorphous quinine, quinidine, and the Lord knows what else ending in *ine*, which they confidently offered to their medical patrons. These new preparations were successively tried, eulogized, and discarded, and by many physicians the interference of the chemist was beginning to be looked on as an impertinence, and his processes as so many devices for enhancing the commercial and depreciating the medicinal value of drugs. Sensible synthetical medicine was begining to think seriously of a complete return to the natural drug, when lo and behold, astute analytical chemistry comes forward with a new preparation said to contain "the whole group of bark bases." It remains to be seen whether medicine will allow herself to be once more cajoled by the speciousness of this new chemical dodge, or whether she will have the sense to perceive that "the whole group of bark bases" is contained in the natural bark, and that the probability is that not much good is done to this "whole group" by being violently separated by chemistry only to be again thrown together again. We offer as a curiosity to our readers the following extract from *The Record of Pharmacy and Therapeutics*, (which is in fact merely the advertising circular of a new apothecaries' company) in order to shew the manner in which chemistry seeks to

render herself indispensable to medicine, and thus obtain a beneficial interest in the patient.

"*Sulphate of Quinoidine.*

"*This preparation is believed, on good evidence, to be superior to sulphate of quinine, as an antiperiodic against fevers, and as a tonic, and also as a prophylactic, effectually preventing the access of fever, and other effects of malaria, when taken by persons exposed to miasmata.*

"Dr. Pereira has stated, and he expressed the combined testimony of the profession, that sulphate of quinine does not fully contain, or represent, the medicinal virtues of cinchona bark.

"This therapeutic fact is of great importance. It is readily explained, although, for reasons chiefly commercial, it has been little noticed.

"When the disulphate of quinine is crystallized from the solvents used to extract it from bark, a mother liquor is left, which being evaporated, yields a resin-like substance, uncrystallizable, but soluble in acids, and neutralizing them, with the strongly-marked flavour and other properties of the bark. To this substance the name quinoidine was applied. Many cursory but very imperfect chemical examinations of it were made, but beyond the fact that it was a group of organic bases nothing definite was made out. The manufacturers of sulphate of quinine laid it aside until a very large quantity had accumulated.

"In the year 1846 Professor Liebig published a statement that it was nothing more nor less than quinine in an amorphous, or uncrystalline state, bearing the same relation to the crystalline, that treacle bears to sugar. The ground for this opinion was, that when treated with caustic potash, and subjected to distillation, it yielded a product termed Quinoiline—a product also of the same process pursued with crystalline quinine. Liebig's paper was first published in the *Lancet*, Vol. I., 1846. It involved a serious error—namely, that quinoidine was merely amorphous quinine; whereas, although it contains a large proportion of amorphous quinine, it also embraces several undetermined bases. A patent was taken out at the same time for the separation of these bases from the amorphous quinine, and the latter has been since used to a very considerable extent. That part of quinoidine which is soluble in ether is certainly chiefly amorphous quinine. In a medical point of view this separation was a

great mistake. The amorphous quinine by itself lay under the same objections as the crystalline—it does not represent the remedial powers of the bark. These seem to be very completely comprehended in the whole group of bases contained in the quinoidine.

"Liebig adduced incontrovertible testimony to the medicinal value of what he called amorphous quinine, but his description applies only to quinoidine. In fact, the separation of the other bases lowers and deteriorates the important property which, for therapeutic puposes, the quinoidine possesses.

"No satisfactory chemical investigation has ever been made respecting the nature of this group of bases. The entire quinoidine, separated from the mother liquors, purified by solution in acids, and precipitated by ammonia, or the other alkalies, becomes pure, soluble in acids, which it neutralizes, forming salts, all, however, uncrystallizable.

"The *sulphate of quinoidine* thus prepared possesses the physical and remedial properties of the bark, very condensed and extremely powerful.

"Almost concurrently with Liebig's publication, Dr. Natorp, of Berlin, stated that he had used it with great success in the treatment of agues, and as a tonic. Upon his recommendation it was adopted into the Prussian Pharmacopœia as the best representative of the bark. Since that time no one, who has the proper substance to experiment with, has expressed a contrary opinion. English systematic writers—Dr. Pereira, Dr. Neligan, and others—in mentioning quinoidine, show evidently that they had not investigated the subject.

"The most recent publications on the medicinal efficacy of quinoidine are a paper by Dr. Harting, in Schmidt's *Jahrb.*, 1853, and Dr. Da Costa, in the *Philadelphia Medical Examiner* for May, 1855.

"Dr. Harting states that, from twelve years' experience in the treatment of agues, he finds it to be superior to the common sulphate of quinine. Dr. Da Costa gives a summary of fifty-three cases of intermittent fever treated by quinoidine. In many of these the disease was of long standing. The rigors were arrested in forty-nine cases by the first administration of the medicine, only four requiring a repetition. The quantity given varied from sixteen to forty grains; the average was twenty grains. Six grains were given a short time before the expected accession of the paroxysm, the rest at intervals

during the intermission. The quinoidine did not give rise to headache, singing or boring in the ears, nor to sickness, the ordinary effects of large doses of sulphate of quinine.

"The advantages of sulphate of quinoidine are, therefore, very considerable. Its superior medical efficacy depends, first, on its containing, associated with amorphous quinine, very energetic bases derived from the bark; second, its uncrystalline state, which renders it more readily assimilated. Drs. Prout and Daubeney have shown, on physiological grounds, that uncrystallized substances are more congenial to the animal economy than crystalline. Indeed, it is a fact, although little noticed, that sulphate of quinine often passes through the system undecomposed, and may be found in the urine; and this fact explains one cause of its frequent failure to arrest intermittent fevers.

"As in so many other cases, a perfectly worthless substance, the mere refuse of the quinine manufacture, having no basic properties, and insoluble in acids, is often sold for quinoidine. In other samples which have been examined, there is nothing soluble in ether, *i. e.* no amorphous quinine. To apply to the latter substance the designation quinoidine is fraudulent: the bases of which it consists have certainly a remedial value; they form, when neutralized with acids, a valuable tonic, but they ought to be clearly distinguished, and sold at a far lower price.

"As an antiperiodic, or as a prophylactic, it appears to be most important to employ the whole group of bark bases termed *quinoidine.*"

Auscultation of the Ear.

On the 3rd of September last a letter was read at the Academy of Sciences, from Dr. Gendrin, on the diagnosis of affections of the ear by auscultation. The following is the substance of this communication:

"By means of the stethoscope, or my own ear applied immediately to that of the patient, I ascertain the sounds produced in the internal ear of the person I examine, by the propagation of the sonorous vibrations of the cough, of the voice, of whistling, purposely modified in various ways. I take care to render the propagation of these sonorous vibrations more complete by closing the patient's nostrils. As the qualities of these sounds vary with the physical conditions of

the cavities and membranes that transmit them, I thence derive pathognomonic signs for the various lesions of the organs. In the physiological (normal) state, each vibration causes in the internal ear a dull, soft, distant, bellows sound, which ceases before the termination of the expiratory movement. If the membrane of the tympanum is perforated, this sound becomes sharp, dry, sometimes even whistling and more prolonged. If the Eustachian tube is contracted, it becomes intermittent, and the expiratory murmur appears to be composed of several successive murmurs, accompanied in most cases by crepitating sounds, occasioned by mucus in the trumpet-like extremity of the Eustachian tube or in the cavity of the tympanum. Crepitation is also heard in caries of the internal ear, or in cases when there is a deposit in the internal ear itself, or in the cells of the mastoid process communicating with the drum and the unobstructed Eustachian tube; but in such cases the crepitations are dull and moist. The expiratory succussions of cough render the abnormal sounds referrible to the various internal lesions of the ear, shorter, more decided, and consequently more easily heard than in simple expiration. Inspiration does not produce any sonorous vibrations audible in the healthy ear; but if the membrane of the tympanum is perforated, while the Eustachian tube remains permeable during inspiration, a very sharp, whistling murmur, mingled with moist crepitation is heard in the ear, and often by the patient himself. The voice heard in the ear seems duller and vibrates but little, it is interrupted by frequent intermissions which abruptly separate words and even syllabic sounds. It degenerates into a confused and inarticulate murmur if the Eustachian tube is contracted, or if the cavity of the drum is filled by mucus, by pus, or by a central exostosis of the petrous portion of the temporal bone. If it is completely extinguished and inaudible, the Eustachian tube is closed up. It is whistling and accompanied by crepitation bubbles when the membrane of the drum is perforated. In the normal condition, whistling with the lips is transmitted by the middle ear as a sharp whistling murmur coming from a great distance. It reaches the ear of the auscultator weakened and interrupted by intervals of silence if the Eustachian tube is contracted, and if the tube is obstructed it is not heard at all. On the other hand, if the membrane of the tympanum is destroyed while the Eustachian tube remains permeable, the whistling becomes very acute and appears to be very near; it appears to the observer as though the patient were whistling right into his ear."—(*Art Médical*, Dec., 1856).

We consider these additions to our means of diagnosing the morbid conditions of the ear highly important but at the same time very incomplete. Dr. Gendrin omits any allusion to the effect produced on the sounds by the occlusion of the meatus auditorius externus by polypi, contraction of the canal, or wax in the ear. This omission, however, is of no great practical importance to those conversant with aural inspection, as these morbid conditions are easily detected by the speculum. There is, however, another mode of auscultating the ear to which Dr. Gendrin does not allude, but which we have often found useful in practice; what we allude to is observing the sounds produced by the patient forcing the air into the cavity of the tympanum through the Eustachian tube. This he does by keeping the mouth shut, holding the nose, and blowing with greater or less force. This produces sounds which vary greatly in different morbid states of the ear, and many of these sounds being perceptible to the patient himself, we may thus make him his own auscultator. There are also certain sounds perceptible in the ear on swallowing, which are of importance in assisting us to arrive at a knowledge of the condition of the ear. We have not space on the present occasion to describe these sounds in detail. In some future number we may return to the subject.

Nicotine and Strychnine.

The Rev. S. Haughton, a Fellow of Trinity College, has just given an account of some experiments on the properties of nicotine and strychnine, at a meeting of the Royal Irish Academy. He stated that he was induced to make the experiments by the consideration of the specific actions of strychnine and nicotine upon the muscular system, which appeared to be so opposite in their character as to lead him to a conviction that they might prove to be mutually antidotes to each other's action. It is generally believed that strychnine exerts a specific action upon the lower or lumbar portions of the spinal column, exciting the muscular system (at least the voluntary muscles) into a state of tetanic contraction, and ultimately producing death indirectly, by rendering respiration mechanically impossible, by virtue of the permanent contraction of the pectoral muscles; and not, as was once supposed, by its action upon the heart. It is also well known that the most powerful agent we possess for relaxing the action of the muscles is nicotine, whether administered in the

form of tobacco smoke or infusion of the leaves. From these well known facts he (Mr. Haughton) was led to believe that these powerful poisons might be used as antidotes to each other's action, and with the view of testing this conjecture, he made several experiments. Four of these went to show the effects of the two poisons separately. The fifth and sixth are important, as they appear conclusive to Mr. Haughton as to the action of nicotine in retarding, and in certain cases in completely counteracting, the effects of strychnine. In the fifth experiment, a frog had lived for 47 minutes in a mixture of two solutions, of which one would have destroyed life in four minutes, and the other would have produced paralysis in one minute, and destroyed life in 23 minutes; and yet in the mixture the animal had lived for 47 minutes, and afterwards for 24 hours. In the sixth experiment, the frog immersed in a similar mixture of the poisons for 10 minutes had ultimately recovered, the effect of the strychnine being completely obviated by the action of the nicotine. Mr. Haughton expressed a hope that further enquiries would be instituted into the action of strychnine and nicotine upon some of the warm-blooded animals, as he believed that in nicotine, which was always easily procurable in the form of tobacco-leaf infusion, would be found a valuable antidote in at least some cases of strychnine poisoning, whether intentional or accidental. *Medical Times, 6th Dec.*, 1856.

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*On Revaccination.**

There seems to be a general tendency in the departments to talk about the subject of *revaccination* this year. This is a new phasis in the history of vaccination. As long as it was thought that vaccination was invulnerable, the idea of repeating it never occurred to anyone. New facts have, however, come to light, which have produced a change in both the doctrine and the practice. But if vaccination has lost its prestige of infallibility, it has within itself the power of recovering it. Thus revaccination attests at once the weakness and the strength of vaccination: the weakness, because it sometimes allows itself to be assailed by variola; its strength, because it suffices to repeat it in order to restore to it what it has lost.

There are two modes of proving the utility of revaccination,

* Extract from the report read by M. Bousquet, to the Academy of Medicine, June, 1856.

[illegible] and observation, and if observation might do alone, without argument, the latter has undoubtedly the advantage of satisfying the mind and strengthening the conviction.

Let us commence by argument, and first let us recal the facts on which it rests. It has been noticed, that even in its aberrations, variola follows a kind of rule in regard to vaccinated individuals. It does not attack them indiscriminately as might have been supposed; it makes a kind of selection; it respects the newly vaccinated; it rages among those who have been vaccinated a long time. Why does it display this partiality? What protects the first? Undoubtedly the vaccination. But why does it not also protect the second as well? Because the revolution it effects in the organism is gradually effaced in the course of time. We must then come to its assistance; we must strengthen it. The mode of doing so is plain and palpable: it is to recommence; it is to temper the economy at the same source, as we temper iron in order to harden it. What vaccination has done once, why should it not be able to do it a second and a third time? There are also subjects and temperaments for whom one attack of variola is not sufficient to extinguish all their susceptibility for this disease; they require several. Should we, however, say, that the second was useless, and adds nothing to the first? The argument we employ in the case of the repetition of the variola, we employ also in the case of the second vaccination, and we consider ourselves the more justified in doing so, seeing that, in our opinion, vaccinia is in reality nothing but a small-pox. Such is our conviction on this subject, that in place of being astonished that vaccination protects from the small-pox, we should feel much more so if it did not protect.

For those who want facts we shall now proceed to give some. They abound in the correspondence for 1854.

M. Those observed 229 cases of small-pox; 140 on vaccinated, 88 on non-vaccinated persons. The proportion, as everyone may see, is considerable; he is astonished at it himself; but he soon recovers from his astonishment, when he considers the modification which vaccinia effects in variola, even when it is found to yield to the latter. "In the vaccinated," he says, "the confluent form occurred in the proportion of less than one-seventh (19 in 140); on the contrary, in the non-vaccinated, the confluent cases amounted to more than one-half (58 in 89).

But that is not saying enough: in general the variola of the

vaccinated is so slight, so rapid, so short, that it scarcely runs a course equal to half that of the ordinary variola. It has nothing of variola except the premonitory symptoms and the commencement of the disease up to the suppurative stage. Arrived at that point, it has not sufficient strength to advance further, and it becomes spontaneously extinguished before the resistance it encounters, and rapidly runs into the stage of desiccation. This is so striking that many medical men for a long time refused to acknowledge a true variola in this eruption; they still designate it by a particular name, viz., *varioloid.*

However variola or varioloid, it may easily be promoted by revaccination; M. Those is one of the most devoted and the most enlightened partisans of this practice, and how could he be otherwise? "Hitherto," says he, "we have always succeeded in warding off threatened epidemics of small-pox, and none of those who have undergone revaccination have been attacked, although in constant contact with small-pox patients." None except one girl of 18, who had six pustules of varioloid. She married two years afterwards, tended her husband who was attacked by small-pox, caught the disease and died.

The report of the Department of the Rhone, drawn up Dr. Roi, is a long and interesting argument in favor of revaccination. He gives his reasons for the practice. The first is the circumstance of the liability of small-pox itself to attack an individual more than once. The report gives five cases of this description, and of these three died; for, as we have said, and repeat, the second attack is more serious and more often fatal than the first.

But, after all, this is not the chief reason. It is not to save those who have had small-pox from the chance of its recurrence, that revaccination has been proposed: the revaccinated alone have been thought of. For them revaccination has been established. However the vaccination committee of Lyons wished to limit its employment to periods when small-pox was epidemic; no doubt the danger is then greater, but the means for warding it off are so simple, that they ought to be used at all times and in all places. Dr. Roi affirms that revaccination extends its protective power to all those revaccinated.

The Department of the Gironde makes use of similar language. We owe to Dr. Gintrac, Jun. the account of an epidemy of small-pox, in which he made the most successful proof of the protective

power of revaccination. A woman coming from Gugan to Langon, brought with her the small-pox, which she communicated first of all to her mother and afterwards to her neighbours. Out of 2000 inhabitants 150 were attacked. It was observed that they were all above 12 years of age. A family of the name of Danoy was composed of seven members, the father, mother, and five children. The father and mother had confluent small-pox, the two elder children discrete small-pox, the two next varioloid, and the last escaped altogether; he was not quite 12 years old. In the neighbourhood was an old man of 70, who had lost an eye in a fierce attack of small-pox, the second attack deprived him of the other eye and nearly cost him his life.

Dr. Gintrac found that there was but one way of mastering the pestilence, and that was by revaccinating. He accordingly revaccinated all the inhabitants not only of Gugan but also of the two neighbouring villages of Matras and Teich. No sooner had he done so than the epidemy ceased, as a fire becomes extinguished for want of combustibles. "What better proof could there be," exclaims Dr. Gintrac, "of the efficacy of revaccination?"

It can surprise no one that this practice is continually on the increase. Those who have at first shewn the greatest repugnance to it, end by adopting it. They no longer fear to compromise the destinies of the vaccinated. Look at M. Adde-Margras who was formerly so bitterly opposed to it, now so confident of its value that he declares he knows no better method of reassuring the vaccinated; he has no longer any doubts on the subject unless it be concerning the quality of the vaccine contained in the new capsules; but what does that matter? that is not the question, let us return to it. M. Parmentier (of the Drôme) has up to the present period performed 360 revaccinations; 38 of these only have produced true vaccine pustules: but all those revaccinated by him have profited to the same extent by the operation: not one, he affirms, has taken small-pox, whether the vaccine took or not.

Are further details required? In the month of May, 1854, a nun, Sister Louise, aged 26, though she had been successfully vaccinated, got a pretty severe attack of small-pox, from which she made a good recovery. M. Parmentier, alarmed for the safety of the convent, revaccinated all the young persons in it to the number of 51. Well, the epidemic ceased immediately, he adds, though the good sisters were in perpetual contact with small-pox. Similar

facts are met with everywhere. If we pass from the Drôme to the Aveyron, we find that small-pox having appeared in the philosophical seminary of Rodez, attacked 8 pupils at once. M. Bourguet revaccinated the rest, and it did not spread further. The same danger and the same success occurred at the seminary of St. Peter. There was still the large seminary of theology, but at this establishment the threatened attack was anticipated and warded off by revaccination.

Finally, M. Bourguet, from whom we learn these interesting details, declares that all the revaccinated, to the number of 500, were preserved from small-pox. And yet such was the intensity of the epidemy, that three persons whose faces were marked by natural small-pox, caught the disease a second time.

Dr. Puyoo, in the Basses-Pyrenées, says that an epidemy of small-pox having broken out at Pau, the Lyceum, the Convent of Ursulines and some other educational establishments, "were subjected to a new inoculation of vaccine, and thereby obtained complete immunity from small-pox."

Everyone expresses himself in his own fashion, but the conclusion is invariably the same.

In the Doubs, Dr. Bernard performed 300 revaccinations, 100 of which succeeded, a portion so large that he is vastly astonished at it, but he cannot doubt the evidence of his eyes. However none took small-pox. In one family there was a girl of 13 who took the small-pox; she had four brothers, two were revaccinated and escaped the contagion, the other two refused to be revaccinated and caught the disease. Again, a father of seven children was attacked by small-pox; the children who had previously been vaccinated were revaccinated and escaped the disease. This does not of course prove much, as the influence of the first vaccination might still have been present in the children. However there were some children in the neighbourhood with whom the same precaution was not adopted, and they took the small-pox.

After these facts, and many others which we omit to mention, who could refuse to be revaccinated? Does any one think that the interests of vaccination would be more promoted by concealing its defects than by pointing out the way to remedy them? In no country is revaccination held in higher estimation than in Wirtemberg. What says Dr. Hein, the historian of the epidemics of small-pox he alludes to? After a rather prolix dissertation on the variola of the vaccinated, he gives the following resumé of his observations:—

"Thus on the grand number of 1164 revaccinated individuals, in whom the effect was more or less complete, or nil, it is certain that none took either variola, or varioloid, nor even varicella, with the exception of two only; but as these two fell ill the day after being revaccinated, it is evident that they must already have had within them the germs of the epidemy before the preventive was had recourse to."

Dr. Hein makes frequent allusion to the happy effects of revaccination. He says elsewhere: "Hitherto there is no instance of a revaccinated person having taken the small-pox."

In England, revaccination, though not so frequently employed as in the North of Europe, is nevertheless often had recourse to. Dr. Donaldson states, in the "Edinburgh Medical Journal," that he revaccinated a great many persons during the prevalence of an epidemy of small-pox, and he adds that all those revaccinated were perfectly preserved from variola and varioloid.

Leopold Meyer, Wendt, Mohl, display the same confidence in revaccination. "It is sad," says Mohl, "that vaccination does not protect everyone for ever from small-pox, but I console myself by the reflection, that the operation has only to be repeated in order to obtain complete security."

France has probably been the last country to adopt this useful practice. It was first resorted to in 1828, during the epidemy at Marseilles, of which so much has been said. M. Robert revaccinated 28 persons; in two only of these did the vaccination take, and yet all were protected from the small-pox.

Ten years later, a terrible epidemy of small-pox broke out; it attacked 57 vaccinated individuals. The happy results by the Marseilles practitioner were remembered, revaccination was adopted, and with complete success.

In 1832, at Malta and at Geneva, it was not considered enough to practise revaccination here and there, it was done on a grand scale, and the historians of those epidemics expressly state, that those revaccinated escaped the contagion, whether the revaccination took effect or not.

Is it not a remarkable circumstance, that the protection should be equally efficacious, whatever the result of the operation, whether vaccine pocks appear or no? And yet on reflection we shall find that easily accounted for. In the first case it is probable that the first vaccination had only partially extinguished the susceptibility to

small-pox; the second completes the process. In the last case the organism was insusceptible to variola, and the revaccination was consequently useless. But how is this to be known? There is no sign to guide the practitioner, and in his uncertainty he consults prudence, in the absence of the light of science. He revaccinates everybody, preferring to do a thing that may be useless to the greatest number, than to leave the others in a false security.

The essential point is, not to use for revaccination any vaccine of which one is not perfectly sure, otherwise the test will not deserve the slightest confidence. This precaution is not so absolutely necessary for the first vaccination. If good pocks do not appear we may repeat the vaccination two or even three times, until the resistance of the organism is overcome. But for revaccination the case is different; we rely on the first trial, and so much the more readily as the failure redounds to the credit of the first vaccination. And yet we have known practitioners who employed dry vaccine preserved between glasses; they generally failed, and from their want of success they immediately concluded that revaccination was utterly useless. To them we say that that experience is valueless, the negative result of which may be attributed to the improper mode of procedure, or to the unskilfulness of the artist.

On the use of Sulphate of Bebeerine in Menorrhagia.

By Prof. A. P. Merril, M.D.

A few weeks ago I was summoned in haste to a lady suffering from an attack of menorrhagia. She had been long subject to excessive menstrual discharges, and uterine hæmorrhages, and had been treated for them by several physicians without success. I administered five grains of the sulphate of Bebeerine, which I happened to have in my pocket, and ordered twenty pills of four grains each, one of which she was directed to take every two hours until relief should be obtained. On visiting her the succeeding day, she showed me the twenty pills, and said the dose I had given her suspended the discharge before they were brought from the druggist, and she deemed it unnecessary to take them. One other case occurring about the same time, in all respects very similar to the above, was relieved, also, by a single dose of five grains. I could relate more than a dozen cases besides the foregoing, more or less severe, in which the sulphate of bebeerine has been successful. Several women of this

city are now in the habit of keeping the remedy always at hand, with perfect confidence, from the results of their own experience, of being able to restrain excessive menstruation and uterine hæmorrhage, whenever they may occur. In several cases, also, I have known it relieve leucorrhœal discharges, and to give tone and vigour to the vagina, suffering relaxation from the effect of such discharges; and it is the only internal remedy upon which I have been able to rely, for the relief of *pruritus vulvæ et vaginæ.* Whether this remedy will prove to be as valuable as the above experiments would seem to indicate, remains to be proved; and it is with a view to elicit such proof, that this publication is made.—*Memphis Med. Recorder.*

Remedies for Hæmorrhage.

In the *Monthly Homœopathic Review* for December, 1856, Dr. Thomas directs the attention of the profession to the anti-hæmorrhagic virtues of the *Hamamelis virginiana* and the *Acalypha indica.* Neither of these remedies has been adequately proved, yet sufficient results have been obtained to show that they have certainly the power of causing hæmorrhage from various organs. The *Hamamelis* has been found useful by Dr. Preston, of Rhode Island, in epistaxis; active uterine hæmorrhage caused by a fall; passive uterine hæmorrhage; vomiting and purging of blood; melæna; chronic varices, and many cases of bleeding piles. Dr. Okie, of the same State, found it useful in a case of congestion and inflammation of the internal genitals in a girl, caused by a blow on the region of the left ovary; also in bleeding or painful piles characterized by burning, soreness, fulness and rawness of anus, with a feeling of weakness or weariness in the back, as if it would break. He has further found it of use in epistaxis, hæmoptysis, phlegmasia alba and varicose ulcers. Dr. Belcher, of New York, gave it (along with other remedies) in a case of variola, accompanied by epistaxis and purpura, and he conceives with good effect. Dr. Hering, of Philadelphia, has given it successfully in severe pleuritic stitches accompanying phthisis. He calls it a "union of Aconite and Arnica." He also employs it in some inflammatory affections of the eye.

The *Acalypha indica* has been successfully used by Dr. Tonnerre, of Calcutta, in hæmoptysis, which symptom he alleges it produced on his own person. We think it right to call the attention of our colleagues to those two remedies, as lately we observe there has

The homœopath Dr. R—— sometimes came to see Heine. The poet had made his acquaintance in rather a singular manner. Some years previously Heine and his wife met the violinist Ernst in Lyons. They had formerly known one another in Paris. As Heine was on his way to Paris, the musician requested the poet to take to his physician there, as a present from him, one of those enormous Lyons sausages, enveloped in tin-foil, which are esteemed such a delicacy. Heine accepted the commission. In those days there were no railways to whirl one in a few hours from Lyons to Paris; the journey in the diligence lasted a long time, and Mrs. Matilda grew hungry. What could be more natural than to cut off a small piece of the sausage, whose gigantic proportions and whose savoury odour filled the coupé. Mrs. Heine tasted a bit and pronounced it excellent. Heine followed her example and was equally charmed. The journey lasted another day, the sausage diminished more and more, and by the time the worthy couple reached Paris it so happened that there remained only a small fragment of the mighty monster. Heine now began to feel how scurvily he had executed his commission. What did he do? He took a razor, shaved off a thin transparent slice of the sausage, and sent it in an envelope to the doctor, accompanied by the following lines:—"Sir, your investigations have completely proved that millionth parts produce the most powerful effects. Enclosed is the millionth part of a Lyons sausage, which Mr. Ernst gave me to take to you. If homœopathy be true, it will have the same effect on you as though it were a whole sausage."

A Homœopathic Mayor.

The election to the supreme civic office of mayor has of late years given frequent opportunities to the burgesses of our towns to shew their freedom from sectarian prejudices. Thus we have seen the civic chair of various towns filled by quakers, Roman catholics, and Jews, amid the gratulations of those who call themselves friends of progress, and the frantic denunciations of the partisans of fogydom, and the self-appointed defenders of our glorious constitution of Church and State. When we consider that the *odium medicum* is scarcely inferior in intensity and bitterness to the *odium theologicum*, we cannot help viewing the recent election of a homœopathic physician as mayor of Doncaster as a triumph of liberality over prejudices which we know to our cost are not confined to the profession.

who is treated homœopathically? It is said, oh, the doses are imponderable, and therefore harmless; but there is as great danger in medicine in leaving undone those things we ought to have done, as in doing those things we ought not to have done. Common sense and scientific experiment have alike proved that homœopathic globules can possess no medicinal property whatever. The danger of trusting to them therefore in the case of acute and dangerous diseases, is self-evident. The patient who trusts to them dies as much from neglect as if left without treatment.—*Med. Times and Gazette*, Dec. 13, 1856.

And it is confidently expected in the Canard country, whence the above information is derived, that before long some medical Ditcher will apply to the Court of Queen's Bench for a mandamus to compel a recusant magistrate to pour down the throats of all the homœopathic gentry in his territory a draft of salts and senna whenever the said Ditcher deems it advisable for the constitution of the county which enjoys the inestimable blessing of his residence.

Homœopathic Congress at Brussels.

The Congress of the Gallican Homœopathic Society was held in September last in the Belgian capital, and was attended by forty members. The meeting seems to have gone off with much eclât, and several interesting papers were read, which gave rise to lively discussions. The next meeting of the Congress was fixed to take place in Paris in 1859. A prize, to be then awarded, was announced for the best essay on the following theme:—"What are the characteristic symptoms, especially of serious diseases, that suffice to determine the choice of the homœopathic medicine?" * We cannot congratulate the Congress on its choice of a subject for a prize, and are not astonished to learn that it was suggested by that inveterate symptom-hunter Bönninghausen. We have only to read the Introduction to his *Manual* to know what his notion of characteristic symptoms is; but we doubt very much if they would pass for such with any jury of sane doctors. The fact of the matter is, a satisfactory reply to the question is simply impossible, at all events within the legitimate limits of a thesis. It might be possible to

* We shall give the French in case we may have missed the true meaning in the above translation: Quels sont, surtout dans les maladies graves, les symptômes caractéristiques suffisants pour décider le médecin dans le choix du médicament homœopathique?

undertaking the duty imposed on him, stipulating of course that he was to have an abundant supply of nurses, dressers, flannels, and other necessaries, all of which were readily promised to him. All the patients brought to the hospital were to be sent on alternate days to the homœopathic and allopathic wards. The mayor's request was dated the 31st of August, and on the 2nd September Dr. Chargé commenced his labours. It is true that Dr. Chargé resigned his trust after three reception days; it is also true that during those three days twenty-six patients were received and twenty-one died, as Dr. Bouquet stated, but his letter gave no explanation of the reason of Dr. Chargé's retirement nor of the cause of the excessive mortality in his wards. According to Dr. Chargé's account, the promises given by the administration of the hospital in reference to nurses and necessaries were not fulfilled. In the male ward there was but one attendant allowed, and he† was soon laid up and useless, so that the homœopathic physicians had to do the duty of nurses as well as doctors, which of course they could not long continue to do. There was a great want of bed-clothing, flannels, &c.; only one pupil was provided to assist the medical men, and he was soon laid up by sickness. The admission of the patients on alternate days to the allopathic and homœopathic wards, which seemed to remove all possibility of a selection by either party, had not that effect, for as patients in the other wards when they took cholera, as they often did, were transferred to the cholera wards, and as this process of transfer was entirely in the hands of the allopathic medical officers, an opportunity was thereby afforded them of retaining in their own wards patients attacked by cholera on the day of the allopathic admission until the following day, when they might be thrust in a dying state into the homœopathic wards. And this Dr. Chargé asserts was frequently done; which will account, in great measure, for the extreme mortality in his wards. In the face of all these unfavourable circumstances it would have been madness to continue the trust confided to him, all the conditions of which had been so faithfully performed by himself and homœopathic colleagues, and so vexatiously evaded by the opposite party. Without assistants, without the requisite bed-furniture, with the control of the admission of patients in the hands of adversaries eager to damage the reputation of homœopathy, Dr. Chargé was forced to retire from the unequal contest. He might almost have said with the defeated Francis, "tout est perdu fors l'honneur." No! the credit of homœopathy is not affected by such an unfair trial. We cannot blame Dr. Chargé for having complied with the request of the mayor, for it is impossible he could have foreseen the obstacles that were thrown in his way; but his essay of homœopathy in the Hôtel Dieu of Marseilles may serve as a warning to those chivalrous homœopathists who are always demanding a ward in allopathic hospitals for the trial of homœopathy. Nothing of the sort should

† There are *infirmiers* in the French hospitals—of the rougher sex.

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Dr. Sommer, of Frankfort on Oder, said he had observed three cases of diabetes among the workmen in a zinc manufactory.

Dr. Genzke called attention to *asclepias vince toxicum* in reference to diabetes, which it produces in the sheep.

Dr. Karbe reported a cure of diabetes by means of ox-gall and a fatty diet.

Dr. Kafka communicated a proving of *atropinum sulphuricum.*

Several other subjects occupied the attention of the meeting, and the Congress was terminated by a dinner, which was well attended both by medical men and the lay friends of homœopathy in Dresden.

The number of members of the society present amounted to 49.

By the way we may as well state for the information of those among us who are members of the Central German Society, that a law was proposed at the meeting of 1855 and confirmed at that of last year, whereby each member is to pay two Prussian thalers (= 6 shillings) annually. We see no objection to this demand, except the difficulty of collecting the subscriptions from foreign members, if it be intended that they should pay. Perhaps it might be as well that foreign members should only enjoy honorary membership and not be called on for their subscriptions except for the year when they actually attend a congress. Moreover the report in Hirschel's Journal, whence the above is derived, does not say to whom the subscriptions are payable.

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THE

BRITISH JOURNAL

OF

HOMŒOPATHY.

THE CONVERTIBILITY OF DISEASE NOT ITS CURABILITY, AS ILLUSTRATED BY GOUT AND THE VARIOUS FORMS IT TAKES.

By Dr. Acworth, Cheltenham.

There is no mistake more often made in medicine than by those who, when called upon to treat a set of symptoms, think, upon the disappearance of those symptoms, they have therefore cured their patient. They may, or they may not. The patient may be labouring under a disease which assumes at one time a certain set of symptoms, at another, quite a different one. And then the physician will seem to cure disease, when the utmost he has done is to change its features. It has only abandoned the shape it took, to play another part in some future masquerade. The character varies—it puts on a different mask—but the wearer of it remains the same.

Amongst the many ills that flesh is heir to there is none that illustrates those views like gout. It is the very Proteus of disease. The various forms it takes can scarce be told. Now it appears in a well known shape, and, anon, it makes its appearance in another that is, perhaps, as much unknown. For so varying are its features as very often to prevent its recognition. It is not always easy to detect it behind the many masks it wears. And then, moreover, not only its features but its whereabouts, too, it so constantly is changing. At one time

it is here, at another, there—now it is in this place, now, in that. It fixes its habitat anywhere and everywhere. For, though it has its favourite seats, there is no part of the body it refuses to reside in. It often lurks where few would think to find it. The most out of the way places, as one might suppose, it sometimes chooses for its own. It will make itself felt in the tip of the tongue, or the very last joint of the spine. There is no anomalous symptom, in short, and no anomalous set of symptoms, that it will not occasionally give rise to. In fact, if the physician meet with such, and knows not how they can be otherwise accounted for, he may safely, in general, put them down to gout.

Of course, in thus using the term gout, something more is meant than gout in its acute stage. Every one knows what a fit of gout is—that it sets in with symptoms of general derangement—that it spends itself then, on the great toe generally, where it gives rise to swelling, heat, and pain, but unattended with any thing like danger—that sometimes, however, it leaves its chosen seat and flies to one where it threatens greater mischief, as the heart, the stomach, the brain. This is the acute and primary form of gout that, in general, attacks the hardy and robust, as our sporting and fox hunting squirearchy, for instance, who live in the air, though not upon it, but take large draughts of something else beside, and build themselves up on beer as well as beef. Theirs, however, is not the form of gout—and these are not the sort of men that exhibit the forms of gout—here spoken of. But, just as these may leave descendants differing in character widely from themselves, so, too, may the gout differ born of theirs. For, gout in successive generations wears features quite unlike those of gout in the first. The heir of one who divided his time (except what time his foot was swathed in flannel) between the pleasures of the field and of the table, may have led a life as temperate as possible, and never known what a fit of gout was like. But strange it will be if he escapes the liability to some form or other of that disease which is not less surely entailed than his estate. "The sins of the father are visited on the children, to the third and fourth generation." And how especially this

holds true of gouty fathers (or the fathers of gout), and what the nature of that visitation is, the object of this paper, partly, is to show.

Let a man lead such a life of luxury as, of itself, to generate gout,—let him live, as people call it, well,—that is, instead of ever knowing what it means to "live upon sixpence a day, and earn it," let him eat and drink and do nothing for his living,—and yet the evil result of all this may show itself less in him than his descendants. The gout thus generated may cause him much less suffering than that which he transmits may inflict on those who never have what is called a fit, or suffer from it in its regular form. The sin of the father (gout acquired) that visits him in its regular form—in fits that, however acute for the time, pass away, leaving long intervals of freedom—is visited on the children (in gout transmitted) to the third and fourth and later generations, in every shape and form of disease that may change its character, yet never pass away, but make this life a constant scene of suffering. It is not, then, gout in its primary form—acute gout, whether acquired or not—that this paper has to do with:—but with those chronic and anomalous complaints, those ever-varying forms of gout transmitted, that are very easily thought to be cured, when they are only converted into each other.

In illustration of these views, it may be worth while to consider—a frequent form of gout—neuralgia. In a very large proportion of cases neuralgia is but another name for gout, or what, for lack of a better name, is called rheumatic gout. The one is easily resolved into the other. To give some cases to exemplify this statement:—

A lady, about fifty years of age, sought advice of the writer, some time back, for noise in the head, so annoying and distressing as quite to rob her of her early rest. It was not in the ears, but in the back of the head, and was worse on lying down at night. Along with this noise, which scarcely ever left her, she was subject to symptoms of indigestion, and occasional fits of brow ague, or neuralgia. Her father, or grandfather, died of gout, and this was assigned as the cause of her complaint. She obtained great relief from Aconite and

Sulphur given alternately every week, but was then obliged to leave home for awhile During this time, however, spent in town, she was seized with gouty inflammation of the eyes, and under the first of oculists there, lost the sight of one eye, and nearly lost the other. The preservation of that other, it is believed, would have been hopeless but for the use of a very rigorous diet, and a return to homœopathic treatment. But, the strange thing is, that any disposition which now and then is seen to inflammation of that eye, is always preceded, not by regular tertian ague, but neuralgic pains in the region of the orbit, and that all the different sets of symptoms, which one and the same disease may change into, are getting equally well together, and observe the same rate of progress and improvement.

A lady, past sixty years of age, has been subject, during the last decade of her life, to the most anomalous symptoms. At one time, sudden giddiness would seize her, so that she could scarcely walk abroad without the fear of falling. The attack would always end in her getting rid of wind. At another time, flatulence would so distend the bowels as to make the whole abdomen tympanitic. Sometimes she would suffer from palpitation of the heart, sometimes from violent and most restless agitation, ushered in by chills, and afterwards hot flushes. Now she would be seized with loss of feeling on one side, (attended sometimes with difficulty of seeing), and anon, with the most excruciating pain in the very last joint of the spine. This pain has not been unfrequently accompanied with symptoms of dysentery, and those of strangury besides. She would rise in the morning with a fearful headache, that went away as quickly as it came, and be attacked later in the day with such dyspnœa as was seemingly much rather of a nervous kind than dependent on her emphysematous lungs. All these symptoms would be cured, *pro tem.*, by medicines—that is to say give place to other symptoms as strange and as equally capable of cure. That all of them might be well referred to gout, seems obvious for the following if no other reason. Some years ago, amongst her other ailments, she suffered from neuralgia of the most excruciating kind. The seat of its attack

was the face, or spine, or, still more frequently, the arm. In the days of her allopathic treatment, and during the time the paroxysms lasted, she would drink large draughts of wine like water (though she could not take half a wine glassful when well) to relieve her pain and the prostration that it caused. But, wine and quinine, though relieving for a time, seemed only, in the long run, to aggravate the malady. Afterwards, homœopathic treatment cured, or rather displaced, the tic. The neuralgia fixed itself then in the arm; but the noticeable point in the case is this. The pain, that ran from the shoulder downwards, would expend itself with the utmost fury on the middle joint of the right first finger, and then for a time would cease. Gradually, during the course of treatment, and as the pain was relaxing in severity, the knuckle affected was observed to swell, till, at last, a gouty node was seen that made it twice or thrice the size of any other. The progress of the node and the degree of pain kept on in inverse ratio with each other. The neuralgia ceased when the node had ceased to grow. But what is still most strange remains to be told. During the last few years of treatment which the patient has been under, more or less, on account of the varying sets of symptoms mentioned, the node has been gradually diminishing in size, till now—when she is freer from her customary ailments than ever she has been before—it would hardly attract attention.

Now, these two cases are quite enough to illustrate the views that are here set forth—how one and the same disease may give rise, at different times, to different sets of symptoms, the disappearance or conversion of which into each other is too often regarded as the cure of the disease. What is contended for among other things is this, that in a large majority of cases, neuralgia is but another name for gout—that it is not merely of gouty origin but very gout itself—just as much chronic gout, in fact, as a set of symptoms are not the less acute gout when seated in the stomach instead of the great toe. This may make all the difference in their character but not in the nature of the disease. The disease itself remains the same, but the symptoms vary according to its seat, or the organ or structure it attacks. It spends itself on some nerve or nerves, and then the patient has

neuralgia, and the doctor is sent for to do his best or worst, and, by and bye, it may be, the neuralgia yields to the different remedies he uses. Has he, therefore, cured the disease the patient labours under? By no means. He has merely made it change its features. The neuralgia is gone—at least for a time—but then it has only disappeared to convert itself into another set of symptoms which very soon take its place. The harlequin disease, of which it is a form, reappears but too soon in a new disguise. And now the patient has gouty headache—or gouty indigestion—or, it may be, gouty inflammation of the eyes. The materies morbi, so to speak, in other words, the gouty principle, remains exactly as it was. It may show itself chiefly in the organs of digestion, and give rise to dyspepsia with its horrid train of symptoms. It may set itself to work in the circulating system, and produce not merely functional disorders, but organic disease of the heart and arteries. It may tell on the respiratory organs, and, perhaps, originate some forms of asthma. It may show itself in the nervous system by symptoms physical or moral—in the one case, by fits of giddiness or headache, in the other, by various affections of the mind. It may make itself felt in some nerve or set of nerves, the result of which is neuralgia or tic. It may locate itself in the urinary organs and produce disease in the kidneys and the bladder. It may fix its traces and its mischief in the joints—for, curiously enough, arthritic nodes bear the same relation, it would seem, to chronic gout as a fit of podagra does to acute. It would seem as if nature strove by these to eliminate peccant matter from the system, and to save and protect important organs at the expense of comparatively unimportant ones. Lastly, gout may tell upon the skin and be answerable for obstinate cutaneous affections, as psoriasis inveterata, for example. Into these and many more forms of disease may gout from time to time transform itself, and so easily are some of these resolved into each other that a wonderful cure will often seem effected when, in sooth, it is only a *change*.

Let any one who deems these ideas fanciful but mark the development of the gouty constitution in different members of the same family. He may find that one has lost his eyes

through gout, that another suffers from violent neuralgia, that a third is threatened with calculus or stone. Let him take the members of another gouty family, and, perhaps, the first has disease of the heart; the second is a martyr to incurable dyspepsia; the third, has asthma; the fourth skin disease, &c., &c. Now, if the hereditary principle of gout give rise, as the writer well believes, to various forms of the same disease, or diseases of a cognate kind, in different members of the same family, it may well effect a Protean change of symptoms in one and the same individual of that family. And so it may be that what seems cured is often but a *change* in the form of the disease.

And, though the disease itself is hereditary, it is anything but necessarily so in the same form. Allusion has been already made to neuralgia as being a frequent form of gout—but it may not be the *form*—neuralgia—but only the *disease*—the gout—that is hereditary. One of the severest cases of neuralgia that it has ever been the writer's lot to see, is under his care, at this present time, in the person of a little boy ten or twelve years old. It is almost ever constant in the shape of earache of the most intensely painful kind. He has been treated by first-rate aurists and physicians without the slightest good, but the reverse. His father and mother are eminently gouty, or of eminently gouty old families, and, before this poor boy suffered from neuralgia, he had suffered from headache and other ailments that seemed attributable to his gouty constitution. This is only one instance amongst many that daily challenges observation of how the hereditary principle of gout embodies itself in the neuralgic form. For, let any one who cares to investigate this matter but question his neuralgic patients well, and he will find that in the majority of cases there are fathers, or mothers, or brothers, or sisters, that have gout in some form, or else rheumatic gout. The neuralgia is but one form of disease out of many that the gouty principle sets up; but this may pass away, while its elements remain, and the disease itself re-germinates in some fresh form. And so we have complaints nosologically different, but pathologically the same.

A young lady consulted the writer some time since for pain in the epigastric region of so severe and obstinate a kind as to

baffle for a while all homœopathic treatment. It, at first, was increased by taking food, but latterly relieved. Various remedies were given with but partial good effect, and the complaint only yielded at last to change of air, or rather, seemed to yield—*seemed*, for, after returning home it was not long before she was seized with intolerable pain just above the right eyebrow and temple. Now, in the one case she would very probably be looked on as suffering from a severe form of indigestion, in the other, from neuralgia. But the complaint, however differently named, was evidently in both cases one and the same, and depended on a hereditary taint of gout.

An elderly gentleman, eminently gouty, sought advice of the writer some time since, for very severe pain at the top of the head, but of a kind he could not well describe. It seemed, however, very much increased by laughing, coughing, stooping, and, in short, by concussion of any and every kind. He appeared but for this in very good health. Spigelia was given with excellent effect. In the course of treatment, he intimated that a similar pain in the pit of the stomach he had suffered from a month or two before, but had got quite the better of by homœopathic means. In either case the *symptoms* were subdued. Each physician had the credit of his patient getting well. But was the *disease itself* cured?

Cases like the above might easily be multiplied were the object not rather to illustrate than prove. Perhaps, there are those who may read this paper that will think the writer has generalized too far. But, the only mode of treatment he has ever found effectual (for the *cure* and not the *conversion* of disease) in the class of cases he has here been speaking of, is itself enough to convince him of the contrary. What that mode of treatment is, is now the point to come to.

Now, in stating what it is, he is well aware that he calls in question that of most of his brethren. But the whole of his experience goes to show that in the class of cases he has mentioned, a cure must be looked for not from medicine alone, but adherence to a diet exactly the opposite of that which is generally recommended. And what his experience goes to show, is it might naturally suggest itself as likely, if one comes to

consider their originating cause. If a highly animalized diet can produce gout, it seems unnatural to suppose that it will cure it. And yet a diet of simple meat and bread is prescribed by fashionable and eminent physicians for all those various forms of chronic gout that must daily and hourly come before them. What wonder then, one might well exclaim, (or might, but for the tendency of minds to run in ruts, and the otiose consent but too frequently given to articles of faith in medicine as in religion) if such dietetic treatment should, after all, be found to increase, in the long run, the very disease it so often is given to cure! That it is so found, perhaps, time may show to those who now prescribe that treatment, if they will only watch future results as well as present ones. But this it is very difficult to do, for in nothing so much as in medicine is seen (and in every thing that has to do with health), the *post hoc propter hoc* mode of reasoning. The system accustomed to a certain stimulus seems better, for a while, for the use of that stimulus—seems worse, for a while, for its withdrawal. *Argal*, the stimulus does good! But is it really of service in the long run? This time must show—or, rather, has shown—and time, if it has not shown, will also show, the merits of stimulating meats as well as drinks. The day may come, perhaps, sooner than expected, when the public, if not the profession, will discover that stimulation is not strength—that what most stimulates does not give most strength. It is *not* denied that present results may often seem to countenance the treatment here inveighed against. It *is* denied that future ones will do so. It is not denied that a stimulating diet (consisting largely of beef as well as beer) may flush the cheeks with the hues of seeming health, and make the blood pulse sharply through the system. It *is* denied that it will give as much strength—quiet, calm, enduring, strength—and as much immunity from future suffering as a diet of a less stimulating kind, or one into which beef enters much more slightly. The relief afforded to present suffering is too often but disease that is funded for the future. To illustrate what is meant by an example.

A lady, fifteen years ago, sought the writer's advice, on account of symptoms that were evidently gouty. Her brother early lost

his eyes through gout. Along with other dyspeptic symptoms she complained of a sense of constant sinking at the stomach that ever seemed to crave for food. Accustomed to live, as the world calls it, well, she could not go through her matins fasting, but must have some little thing before her breakfast, though that was an early and substantial one. Between her breakfast and luncheon she grew faint unless she had a goûter. After her luncheon or dinner at one, that might well have satisfied an alderman withal, she could not wait for her six o'clock dinner without the aid of another goûter. At eight she took tea or coffee, and muffins, and finished off, on going to bed, with a basin of stiff water-gruel. With all this, her health might well seem normal, but a frequent rush of blood to the head, sudden flushes of heat and perspirations, confined bowels, lithates in the urine, and withal an inaptness for bodily exertion, together with all her dyspeptic symptoms, clearly showed this was not the case. She was warned that the sinking at the stomach was only caused by the very means she took to relieve and overcome it; that is to say, by the stimulating diet, the large and free use of animal food—(it is this which, like alcoholic stimuli, gives rise so often to a feeling of exhaustion and sinking at the stomach)—and that if she did not adopt more rigorous measures in regard to diet, air, and exercise, her nervous system would at last break down (as, in such cases, in the end, it will), and make her life a life of misery.

Three summers ago, the writer was telegraphed to see this lady. He found her as he prophesied she would be. Every thing he told her had turned out true. Her nights were sleepless—she could not rest for shocks through her brain, and noises in her ears — (these are not uncommon in gouty patients). Her days were wretched, and passed in so much mental suffering as to make one fear lest her brain became affected. She could not walk—or believed she could not walk—and her nervous system was in that irritable state that she knew not how to occupy her mind, and could not bear the presence of her family.

The treatment of the case was only undertaken on the full perfect understanding that the patient should co-operate

with the doctor for her cure. She was bid to take but bread and butter for breakfast, with a cup of weak tea, and fruit. At one o'clock she was allowed a mutton chop, or a wing of a chicken, for her only meal of meat, with as much of vegetables (which disagreed with her, and always disagree in cases like this!) and pudding as she pleased. At seven o'clock, when her family dined, she sat down again to her cup of weak tea, and bread and butter and fruit. She was made to take exercise every day—passive, largely, at first, and active in proportion as she gathered strength. Nux, Bryonia, Sulphur, Causticum, were given as medicines to relieve her symptoms. She has now lost all her sinking at the stomach, and all unnatural craving for her food. She has got rid, too, of her morbid feelings, and is in such capital health and spirits, that now (though past sixty years of age) she can encounter more fatigue, whether bodily or mental, than any of her daughters.

A lady, thirty-three years of age, unmarried, and of gouty family, consulted the writer, twelve months ago, on account of a very common complaint, but one which he should find it hard to give a name to, unless he called it "general derangement." It was characterized by symptoms such as these: headache, on the least excitement or fatigue; constant sense of lassitude and weakness; frequent feeling of sinking at the stomach, only to be relieved by taking food; a confined state of bowels, and scanty catamenia. She had been in the habit of living well! She had taken, under order, meat twice or thrice a day, with a glass of wine at luncheon, and another at dinner. This order was reversed. She was bid to take only bread and fruit for breakfast, beside her cup of cocoa or weak tea; animal food but sparingly at dinner, with plenty of vegetables and pudding instead; and bread and butter and fruit again at tea. Against the feeling of sinking at the stomach, and the craving for food which was of such an urgent kind that she would not go to bed without a crust beneath her pillow, she was advised to take a glass of water or an apple. Exercise she was ordered every day as much as her strength would allow. Sulphur and Sepia were given alternate weeks. She followed her instructions fairly for six months. The sinking of the stomach is now entirely gone.

She can walk many miles a day without fatigue. Her cheeks are coloured with the hues of health as they had not been for years before. And she has gained in flesh, and not in fat alone, some dozen pounds or more.

Now, these two cases are only here produced as pegs to hang some observations on, and to point the moral that is wished to be enforced. It may, perhaps, be said that in these two cases the results were owing to homœopathic treatment, but let it be observed that both the patients had been treated homœopathically, and well, before they came under new dietetic treatment. The point insisted on is this,—that the very diet that had been given or taken, as proper to a certain set of symptoms, itself caused the symptoms it was charged withal to cure. That constant sense of sinking at the stomach that made a prominent symptom in these cases, is one that will generally be found, where it is met with, as the result of a stimulating diet. It is with stimulating meats as drinks—with animal food as alcoholic liquors. In proportion as they supply more of stimulus than strength are that sense of sinking they afterwards give rise to and that painful craving that would really make it seem "as if increase of appetite had grown by what it fed on." Animal food, when given in excess, generates the very symptoms it is given for—it creates its own medical necessity. A delicate patient comes to a physician complaining, *inter alia*, of sinking at the stomach, and the diet prescribed is what may have been its cause, and present relief is only obtained at the expense of aggravated future suffering. It is not where farinaceous food and fruit become the principal elements of diet that the morbid feeling here spoken of is met with.

And here too much can scarcely be said, as far as individual experience may go, of the importance of fruit as an element of diet. But who ever finds it in his doctor's bill of fare? And who will be so bold as to prescribe for his patient what would almost seem under a medical anathema, and certain of going against his prejudices, if it does not go against his stomach? If he does so, the chances are his patient tells him, (albeit a gouty and dyspeptic one), that he cannot take any fruit or ables, that they always disagree with him, and that he was

ordered by Dr. So-and-So—the last new writer on Indigestion—to take only bread with his mutton chops at dinner, and a couple of glasses of Sherry or Madeira, or a glass of brandy and water instead. And, within certain limits, he is right in what he says. Fruit and vegetables will disagree, at first, with the stomach that is innocent of such very simple fare, and that only makes acquaintance with mutton and Madeira. But in proportion as the stomach is submitted to the change, or the partial substitution of marrow-fats for mutton, will the patient find that vegetables agree. Order a patient who has lived well, milk, and, the chances are, he will say he cannot take it. He will say it makes him bilious. And this, indeed, is so far true as one can make out what he means by bilious, but it is only saying that, through lack of stimulus to which the stomach has been accustomed, it is slow to act on what is easiest of digestion. The stomach is the very creature of habit, and, when it has been whipped and flogged to do its duty, it will not do its duty without, even where it is easiest to do. Restore the stomach to its normal state, and what is easiest of digestion is digested.

But though, only in the cases and for the reasons given, it be true that "man's anatomical construction bears vegetables in a grumbling way," and though it be on insufficient grounds that "your labouring people think beyond all question—beef, veal, and mutton, easier of digestion," such meat is supposed, at least, to be more nourishing, and to impart more vigour to the system. It would be easy to show that this is not the case, if the subject of food be considered chemically, and if physiologically, there is much to be discussed,—albeit there is no room for such discussion in this paper. It is only said instead, as a matter of experience, that in all these cases where the writer has thought fit to reduce the quantity of animal food, or even to proscribe it altogether, he has not found a declension of strength, but rather an increase, in the long run, he should say, and greater power of endurance. At first, the change *may* be slightly felt, as the dram-drinker feels the loss of his dram, but very soon, in that case, the sense of flagging is replaced by one of elasticity and strength.

Another observation to be made here, is this. It may, and

often will, happen, in those cases where the quantity of animal food has been reduced, that, however hopefully the patient is progressing, he is troubled with breakings out and blotches on the skin. This is more particularly apt to be the case in all cutaneous affections. The eruption, at first, may grow worse instead of better; but this is only for a while, and seemingly because nature acts with greater freedom in throwing off and out what is vicious in the system. She seems to eliminate peccant matters through the skin, and makes it, so to speak, do her scavengering. And the more she is suffered to help herself in this way, the less chance is there of the cutaneous affection returning every spring or fall.

The misfortune is, that, in the generality of cases that come within the category of chronic gout, the patient rarely allows his doctor sufficient time to do him good. A disease, it may be, of many years standing is expected to be cured in a few days or weeks. Now, without adopting the humoral pathology, or, at least, adopting that exclusively, how is it possible that a chronic disease originating, perhaps, in a taint of the blood, should be got the better of so quickly? "A little leaven, leaveneth the whole lump;" and the whole mass of blood may require to be changed ere the leavening principle ceases to affect the different tissues of the body. And, if this be so, one may easily see, that diseases, or different forms of disease, orginating in that taint of the blood—as the gouty taint, it may be, for example—may be much more readily converted into each other than quickly and radically cured. The morbific matter would almost seem to have, as it were, an elective affinity for some particular tissue of the body; but, supposing this to be overcome, it can hardly be else than by that morbific matter falling and spending itself on some other tissue that "gives it a local habitation and a name." And this accounts for the serious consequences of repelling anything like eruptions from the skin, and for the alternation one so often sees between these eruptions and complaints within the body. The following is only one example amongst many that every physician must be conversant withal, of the danger of driving an eruption in.

A lady, twenty-eight years of age, consulted the writer for

severe headache, and an eruption on the face of the acne kind. The pain was described as most intense, radiating from a spot just above the right eyebrow, and seemed to partake of the character of tic. She had been under the care of some one in town that had given her, at her own desire, a powerful lotion to rid her of the acne. Whatever it was, it had the effect of changing a painless local affection into a painful constitutional one. She was made to understand that, before she could get better, she must be prepared for the eruption getting worse. Sulphur was the chief and almost only medicine given. She was one of a family of most luxurious livers, and was ordered to take meat but once a day, and then to take it only sparingly; but, of bread, and fruit, and vegetables, what she pleased. Her friends were all opposed to this rigid diet, and thought, and think still, that she must die of it. But she has not only lost her headache, &c., but is very much stronger than she ever was before.

Now, though it be physicians recognise the danger of repelling disease from the surface of the body, are they not too apt to treat its outward symptoms as if they were the disease itself, rather than, so to speak, its outcome? This outcome is but the exponent, after all—" the outward and visible sign," in sooth—of something going on wrong within. And does not their treatment too often *re*pel, not directly, perhaps, but indirectly, what nature would *ex*pel? This would be the case if the diet which they give, instead of encouraging nature, as it were, and helping her to throw out what is vicious in the system, so clogs her powers that she cannot work her will. This would be the case if the diet they give tend to form and cumulate morbific matter in the body faster than their medicines or nature can expel it. And so, internal organs could not choose but suffer. What is the use of medical treatment if thereto dietetic treatment is opposed? That the one is too often counteracted by the other, that, indeed, the one often makes the other necessary, is—with deference to, but difference from, the *pre*scribers of a diet, the writer would *pro*scribe—a belief that forces itself more and more upon him as the result of observation and experience. It

will scarcely be denied that gout is mainly owing to errors of diet, either in the patient, or else in the patient's progenitors. But what seems the orthodox diet for gout? One that allows the very errors that produce it! A full animal diet once or twice a day, with a glass or two of sherry at luncheon and at dinner, is not unfrequently prescribed for one that, perhaps, had never suffered but for this very diet having been taken either by himself or his grandfather before him. And what is the consequence? A materies morbi thus is formed, and accumulates within the body, till, by and bye, it fiercely explodes in the shape of a regular fit of gout, and the great toe is made to bear the brunt of the mischief, and become the conductor through which it passes off. The atmosphere clears, the thunder storm is spent, but the forces and agencies are at work still that produced it. The elements (or aliments!) to which that storm was owing, are busy still, within their silent sphere, till another violent explosion is prepared, and the "*Vis medicatrix Naturæ*" sets to work to discharge again, in this way, the mischief they have brewed. But, cycle after cycle, as gout thus runs its course, the *Vis medicatrix Naturæ*, at last, proves quite unequal to its task. And why? Because, though remedial means may suggest themselves against a fit of gout, no alteration suggests itself in diet—the diet that renders that fit of gout necessary. The fit of gout is necessary to get rid of something wrong. But, if the something wrong should, perchance, be in the diet, and no alteration be ever made in *that*, one can well understand how the something wrong increases, as the power decreases of nature to get rid of it. And then the joints through which it was eliminated become disorganized, too, in time, and the nervous system itself, at last, breaks down, and the patient suffers in mind as well as body. Nothing is more remarkable than this, as a stage, and one of the latest stages, in the history of acute and chronic gout, and also of what is called, rheumatic gout. The man of hitherto cheerful temper grows dejected and desponding; and he that seemed possessed of iron nerves, is now so easily upset, that he will cry hysterically, like a woman or a child. This is what one so constantly sees as one of the last

in the train of symptoms that characterize the latter end of gout. But even this late stage of the disease is not beyond the reach of homœopathic treatment combined with a properly regulated diet.

It will be seen from all that has gone before, that gout, in its various forms, has been regarded as caused by something vicious in the blood—something acquired, or inherited, or both,—something that nature struggles to get rid of, and the retention of which within the body gives rise to the most widely varying morbid phenomena. And this is but in accordance with the doctrine of dyscrasia that modern pathology adopts. But modern pathology does not say upon what a particular dyscrasia depends. In the case of gout, in all its various forms, this dyscrasia the writer believes is mainly owing to too highly animalized a diet—that that which vitiates the blood is introduced in an excess of the animal element of food. Now, if this be so—if gout be merely "a vice of the blood"—we can understand how its elimination (the throwing out of morbific matter which a regular fit may partially effect) should be followed by returning health; and how its retention in the blood (the poison being locked up within the body) should (as in the case of chronic gout) give rise to disease that remains unchanged, though its forms may change and pass into each other, as the virus fastens on this tissue or on that. And again—if gout be "a vice of the blood"—and caused by too animal a diet, as supposed—one can understand how medicine may change its forms and features, but never change the disease itself till the diet, or cause of that disease, be also changed. And further—the dyscrasia upon which the gout depends, if owing to the cause supposed, is one upon which all those ailments may depend which are here supposed to be forms of gout; and as they have a common origin so also may they require a common diet as an element of cure.

Meanwhile, nature seems to do her best to rid herself of the evil that besets her. Regular fits of acute gout leave her disembarrassed for a while; and chalkstones, nodes, and enlargements of the joints, which are some of the products of chronic gout, seem but the outward growth of morbid matter that nature eliminates as far as she is able, to the end that she may

and internal organs free. And any one, who will only be at the trouble of examining the fingers of his different patients, will see how common are those knobby knuckles that indicate the gouty disposition, and the liability to those disorders that have been spoken of as various forms of gout.

With regard to the treatment of these forms of chronic gout—the medical treatment, that is to say—the remedies of greatest use will, perhaps, be found in the list of those that are called the anti-psorics. And this, indeed, may well be so, for many, or most, of those forms of disease, whose origin, according to Hahnemann, is psora, the writer would assign to chronic gout, or regard as the products of that dyscrasia that he would associate with chronic gout. Speaking loosely, he would say that Sulphur and Calcarea he has found more useful than any other medicines in the treatment of most of those obstinate complaints that seem but the metamorphoses of gout. (These medicines seem to play the part of alteratives—to adopt the old school phraseology—especially when given alternate weeks.) But neither these nor the other anti-psorics will do more than effect a change of symptoms, instead of a cure of the original disease, if the diet be not properly attended to.

In conclusion, the writer is well aware that he has not done justice to his subject,—nor would it be possible to do justice to it within the limits of these pages. It is one that he hopes to take up by and bye, when he counts upon being able to demonstrate clearly whatever seems taken here for granted. Much that he has said may pass for mere assumption, and, perhaps, very properly so pass. But his object is less to substantiate than suggest. He writes not now to establish his opinions, but to challenge the lights of observation and reflection which others may bring to bear upon their truth. Enough, if the thoughts he has thrown out set others thinking. And if what he has said still remains to be proved—if his propositions lack their Q. E. D.—he yet may state the conclusion he has come to (as the result not so much of reasoning as experience) on the subject of this paper. It is simply this—that, in the class of cases he has spoken of, a change of symptoms may be easily effected, but not so easily the cure of the disease to which

those symptoms may be traced; and that this is altogether hopeless with the dietetic treatment so fashionably current, and the notions that patients are allowed to entertain with regard to diet and the maintenance of strength. Nor will patients easily be disabused of these, inasmuch as temperance and self-denial are less readily practised than indulgence and excess. Many, or most of them would like to be in health, but without observing its condition. They would fain be well, yet allow themselves what is opposed to their well-being. But this may not be. Physicians cannot reconcile incompatibilities. No amount of fees can accomplish this. A royal road to knowledge is as easy to find as a royal road to health.

ON DIGESTION.

By Dr. J. Rutherfurd Russell.

These are bad times for the young and earnest physician of the old school of medicine. Let him round the circle of the sciences; let him master the stethoscope and the microscope; let him perfect himself in all chemical knowledge; let him understand the most occult anatomy of the body of man and of all living beings; let him advance into physiology as far as it is possible for him to penetrate, and if he then attempt to apply all these vast acquirements to the simplest problem his first patient gives him to solve, by asking him to explain how he digests a mutton chop and a potatoe,—or why he can't do it,—which is the more likely form of the interrogation, our young philosopher will be compelled to make the humiliating confession that from the moment these representative constituents of the material of the flesh and blood enter the mouth till the period of the accomplishment of their mission, their analyses, appropriation, and rejection, every stage of their progress presents subjects for controversy so keen that but for the improvement in the manners of this age we should have discoverers brandishing their knives at one another, and only too thankful that they escaped the fate of George Wirsung, who was assassinated for his daring innovations about the pancreas. "Wirsung mourut assassiné, dit on,

le 22 août 1848. Nous constatons de nouveau ici que les discussions anatomiques et physiologiques suscitent aujourdhui autant de passions." So says Bernard in Paris, and we fancy we hear Herrn Bidder and Schmidt mutter "Gott sei dank" from Dorpat. For there is scarcely a single proposition made by the brilliant Frenchman that is not met either with a point blank contradiction by the patient painstaking Germans, or at least subjected to very rude handling. And the subjects of these controversies are not minute or trivial, but no less than the effect of almost every different agent on the fecula, the albumen, and the fat from the entrance of these substances into the mouth till their disappearance in the intestines. They differ about the action of the saliva upon the fecula, about the action of the gastric juice upon the albumen, about the action of the pancreatic fluid and bile upon the oil and upon the albumen. We shall not be guilty of the presumption of attempting to decide which is in the right, but shall satisfy ourselves with stating the most important conclusions that each party has arrived at, leaving to future investigators the ultimate decision. And we do not think that it is a waste of time to discuss these matters even although we cannot arrive at positive and final opinions upon them, for among the various knowledges we do well to acquire there is none more important than the knowledge of our ignorance.

Without farther prologue we shall at once proceed to detail the observations of Bernard, and Bidder, and Schmidt, upon the action of the different agents to whose operation every kind of food is exposed in the process of digestion.

The first of the long series of changes which food undergoes to prepare it for incorporation takes place in the mouth where it is subjected to the process of mastication and insalivation; the former being a purely mechanical division of its parts so as to form a mass which can be easily swallowed, the latter being partly mechanical in so far as the lubrication of the mass is concerned and its admixture with air, and partly probably chemical from the action of the saliva upon the fecula it may contain. This saliva, which is generally spoken of as a simple secretion is, in fact, a combination of three secretions derived from three different glands, and each of the three possesses

peculiar qualities. The first we shall consider is the secretion from the parotid glands. This consists of about 95 per cent. of water, and its action according to Bernard, is to facilitate mastication. He found that after its obstruction in the horse the animal took much longer to eat its hay, oats, and straw, and that the quantity of the secretion was in proportion to the dryness and hardness of the food. Thus while eating 250 grammes of bread in 3 minutes, 185 grammes of parotid fluid flowed from the ducts, which were exposed so as to be subjected to experiment, while no less than 932 grammes were secreted in 12 minutes when the horse was masticating hay. The absence of this secretion increases the thirst in a marked manner, so that an animal which before the obstruction was satisfied with about 20 kilogrammes of water in the day, required after the operation about 30 kilogrammes to appease its thirst. And this thirst does not arise from dryness of the fauces, for the mere swallowing of water has no effect in abating it, if that water does not reach the stomach and intestines, as happens when an artificial fistula is made in the œsophagus. Thirst is a general not a local appetite, and can only be satisfied by increasing the fluids generally.

The parotid fluid is a slightly alkaline clear watery secretion, containing a peculiar substance called ptyaline along with a trace of albumen; it is under the influence of the facial and the fifth pair of nerves, and when these are excited a corresponding increase of action in the gland is observable. It is essentially an appendix to the function of mastication, and this is probably its only use. There is indeed some discrepancy about its chemical action on starch. Bidder and Schmidt distinctly affirm that it has no action at all upon starch, even after being some hours in contact with it, while on the other hand Jacobowitsch maintains the contrary. However, we may safely conclude that at all events the chemical action of the parotid fluid is quite insignificant, and that Bernard is justified in representing it as subserving mastication and that alone.

The second source of saliva is the submaxillary glands. The secretion from these is limpid like the parotid fluid, but much more viscid, and becomes gelatinous on cooling; it is also

decidedly alkaline, even more so than the secretion of the parotid. Its inorganic constituents are chiefly chlorides, carbonates, and phosphates of lime and soda. According to Bernard the use of this secretion is to assist the functions of taste. The quantity that is poured out by these glands is determined by the greater or lesser degree of sapidity of the food. Thus he found that when sugar and water was applied to the fauces of a dog, there was hardly any action excited in the submaxillary glands, but when the gullet was moistened with diluted vinegar or extract of colocynth there was an immediate and copious secretion. In accordance with this view he also found that while the nerves which supply the muscles of mastication on being irritated increased the discharge from the gland of mastication, viz., the parotid, in like manner when the gustatory nerve was excited by galvanism there was an immediate action observable in the submaxillary gland. Their sympathies are with the stomach, for when the secretion of gastric juice takes place it induces an action in the submaxillary glands and not in the others. The submaxillary, (like the parotid fluid,) seems to have a very trifling if any chemical action on the food, for Bidder and Schmidt found that starch remained unchanged when left for some hours in a mixture of the saliva derived from the parotid and submaxillary glands.

The third and only remaining gland is the sublingual. The existence of this in the dog and some other animals has been denied by many anatomists, but Bernard contends that this has arisen from an oversight on their part, and that the sublingual glands are always present, and the secretion from them possesses properties wholly different from those of the other two sources of the saliva. The difference consists in the much greater viscidity of the secretion, and its richness in ptyaline, and the traces of sulpho-cyanide of Potassium, which are always to be met with in it. It is, in fact, a sort of mucus, and approaches the true mucus of the buccal cavity in all its essential characters, and, as we shall afterwards see, this mucus performs a most important part in digestion.

The distinctive qualities of the three sets of glands are thus, according to Bernard, that the parotid secretion is almost

entirely water, and assists deglutition; the submaxillary more viscid and gelatinous on cooling, and is associated with the property of taste; while the sublingual is also very viscid, and does not jelly on cooling, contains much ptyaline, and co-operates with the mucus in its chemical action upon fecula.

Bernard relates some curious experiments exhibiting the elective power of the salivary glands to pass or to refuse various substances carried to them by the blood. He injected into the jugular vein of a dog, 25 grammes of warm water containing 5 grammes of yellow prussiate of potash, 5 grammes of iodide of potassium, and 4 grammes of grape sugar. As soon as the operation was over, he provoked the salivary glands, and on collecting their discharge he found iodine, but not a trace of the prussiate of potash or sugar. After seven minutes the observation was repeated with the same result. The urine was then examined, and, there, prussiate of potash was found, but neither sugar nor iodine. In twenty-five minutes more they were both examined, and now the urine contained prussiate of potash and a trace of sugar, but no iodine, while the saliva was full of iodine but without sugar and prussiate of potash. In three hours the iodine was recognizable in the urine. Thus, the prussiate of potash appeared in seven minutes, the grape sugar in twenty-five to forty, and the prussiate of potash not for three hours. While in the saliva iodine was found in four hours in its former abundance, but still not a trace of the other two substances which had been injected along with it, and which had both been passed by the kidneys. This experiment, often repeated, never failed to give the same result; and Bernard considers it an established fact, that iodine is at once and constantly discharged by the salivary glands when present in the blood; indeed, its power of passing is so great, that its presence affords an entrée to substances, of which iron is one, which without it would be refused admittance into the salivary vessels. This he proved by various ingenious experiments which we have not space to detail, but the result was that while, in general, salts of iron are not to be found in the saliva, although they have been injected into the blood or stomach, yet iodide of iron forms an exception. But a still more remarkable fact, and

one of special interest to us, is, that when a solution of 2 grammes of iodide of potassium were injected into the stomach by an artificial fistula, long after all trace of it had disappeared from the urine, it was still found in the saliva and in the gastric secretions even after an interval of three weeks. This observation has an important bearing upon the duration of the action of medicinal agents, for its persistence is manifestly due to vital, not chemical laws, and we may now understand the reason of our inability to affect our patients beneficially with our medicines, if they have in their system a poisonous spring, the existence of which we are ignorant. And even if we did know of it, how could we either stop or neutralize this stream of mischief, deranging the healthy actions, and paralyzing our remedies? The wonder is, that in the old poisoned patients who come to us, we can ever do any good at all, and not that we cannot produce, as they expect, immediate and constant improvement!

To return from this digression to the action of saliva; it is a well established fact that the mixed saliva found in the mouth has properties peculiar to itself, and different from any of its constituents. The most probable theory is, that when the secretion from the salivary glands meets the mucus in the mouth, there is then a peculiar action of the nature of fermentation engendered, and that the result of this is to produce a combination which has a very rapid and intense action upon all feculent articles of food. MM. Bidder and Schmidt give a table of the time required to convert starch into sugar in the presence of different secretions, and the chief facts brought out by it are, that this change was *instantaneously* begun, when saliva from a man, a child of three months old, or a dog was brought in contact with it, while it required twenty minutes to make its appearance when the mucus of the mouth without the secretion of the parotid gland was employed, and one to three hours when the parotid and submaxillary glands were substituted. It seems then that neither the buccal mucus, nor the saliva by itself, can do what the two must at once effect. The mixture is required for the ferment.

Although it is an established fact that the saliva found in the

mouth has a most rapid and energetic action upon the fecula of the food, which it converts, as far as its action goes, into sugar; yet we meet with the singular contradiction of there being no sugar discoverable in the stomach, even although the morsel swallowed be at once removed and examined. The explanations offered of this apparent anomaly are not satisfactory; on the one hand it is advanced that the exposure of the feculent materials to the action of the ferment is too short, and that the condition of the starch in the food is not favourable to its being acted on by the saliva; while on the other hand it is supposed that the sugar is either absorbed on its passage to the stomach, or if it reaches that cavity, is immediately converted into lactic acid by the gastric secretions. Such are the explanations; but it is admitted that as yet the difficulties are far from being satisfactorily removed. Thus, at the very outset of the investigation of the process of digestion we encounter an unsolved problem, and we cannot affirm with confidence what chemical changes are undergone by a morsel of bread in its passage from the mouth to the stomach.

The existence of sulpho-cyanide of potassium in the saliva is a curious fact that has given rise to much fanciful speculation. It is known that this salt is a powerful poison, and it is conjectured that the poisonous action of the saliva of rabid animals may arise from an increased quantity of this natural ingredient of that secretion. This notion rests on no evidence of any weight, and we may at once dismiss it as wholly insufficient to account for the phenomena of hydrophobia. At the same time it is certainly important to know that this very poisonous substance is liable to be generated in greater quantity by the salivary organs, when a morbid action is developed in them. Thus Lehmann* examined the saliva of a patient suffering from mercurial salivation, and found its properties very different from the normal secretion: it was thick, gelatinous, flocculent, and very poor in ptyaline; but, on the other hand, contained a large quantity of sulpho-cyanide of potassium. It is certainly not improbable, that some of the noxious effects of this dreadful

* Jahrbuch der Phy. Chem. B. II.

drug—mercury—may be attributed to its exciting this poisonous secretion, some of which must be swallowed to complicate the evils the original poison has inaugurated.

Among the other morbid secretions of the mouth, may probably be reckoned the tartar of the teeth. This consists, fundamentally, of phosphates; but although these salts form the basis of the deposit, particles of carbonate of lime, epithelial cells, &c., are mechanically combined with it, and form a notable portion of the whole. The origin of this was supposed to be simply the evaporation of the saliva; but Bernard has advanced the supposition, that it is the result of a slight inflammatory action of the alveolar processes, a chronic periostitis, depending upon irritation of the organs of digestion, and partial denudation of the roots of the teeth. It is more abundant always in the lower than the upper jaw, because the gums are more pressed from the teeth of the former during mastication; and he found it take place rapidly in dogs, when their digestion was disturbed by a partial closure of the orifice of the gastric fistula, and when the exciting cause was removed, and the normal condition of the digestive functions restored, it as speedily disappeared. This observation has an important practical bearing, and if it is confirmed, the state of the teeth and gums may be found to have a constant relation with certain specific affections of the alimentary canal, and be thus both remediable in themselves, by appropriate medication, and guide the practitioner to the selection of the remedy proper for the cure of the original malady, on which this lesser one has supervened. Thus the lights of advancing science, which exhibit with increasing clearness, the baleful action of the mercury, the iodine, and the other poisoned arrows which fill the quiver of old physic, are so many safety lamps to us, improving our practice by giving us more exact indications of morbid actions, for the excitement of which, *we* are not accountable.

We have made but small progress as yet, all we have done is the division of the food into smaller parts, its mixture with a watery fluid containing much atmospheric air, and the conversion of a portion of its starch into sugar; in this condition

it is projected into the stomach. Here it is exposed to the action of two substances, the one an acid, the other a peculiar principle called pepsine. These two, combined, constitute the gastric juice, and the presence of both is necessary to effect digestion. Till of late, our knowledge of the properties of the gastric juice in its physiological relations, were chiefly derived from the experiments of Dr. Beaumont on his patient, who had a fistulous opening in the stomach; but, recently, various experimenters have found that such an opening being easily made in animals, without causing them much inconvenience, they had in their power to repeat and vary these original observations, and have arrived at many more exact conclusions than before were possible.

It seems ascertained by a great number of experiments, that this gastric juice varies much both in quantity and quality at different times, these variations depend upon the nature of the food received into the stomach; and it is probably owing to this, that there is so much discrepancy about its chemical composition among the highest authorities. As regards the quantity, Bidder and Schmidt found that a dog of 12 kilogrammes yielded

In ½ an hour	63	grammes,	3 hours after having been fed on meal and water.
In 1 hour	21·3	„	with a perfectly empty stomach.
In ½ an hour	33·5	„	when bones were in the stomach.
In 1 hour	62·2	„	in the same circumstances.
In ½ an hour	12·0	„	with a perfectly empty stomach.
In ½ an hour	38·0	„	3 hours after a meal of flesh.

So that in four hours this dog, of 12 kilogrammes in weight, yielded 23 grammes of gastric juice. If the human stomach is equally productive, an ordinary sized man would secrete 6·4 kilogrammes of gastric juice in the twenty-four hours. This estimate is considered very high, but it corresponds with the experiments of Lehmann as to the quantity of gastric juice required to dissolve albumen. However, as it appears that all the albumen received into the system is not dissolved in the stomach, the correspondence is of less consequence, and when we observe such an enormous difference in the yield of different

hours, we may well suppose that there is an equal difference in different stomachs, and that before it is possible to strike an average, it will require an almost infinite multiplication of the observations. It is of more interest to know that there is this difference, and that it is affected by various causes. For example, it was found that the mere sight of a piece of meat called forth a copious secretion of gastric fluid, after the salivary duct had been obstructed. So that the stomach as well as the mouth *waters* at the sight of proper food.

Again it was noticed that while this necessary secretion was thus excited by the prospect of eating, an opposite change took place if the animal had been exposed to a painful operation, then the gastric juice lost its digestive power entirely; this, however, was from a change in its quality not its amount. It lost its acidity without which it has no power to perform its office. This was probably owing to the large quantity of saliva which pain often produces in animals, a sort of weeping from the mouth, and this saliva being alkaline neutralized the acid in the stomach. Thus the operation of sorrow if it gives rise to copious tears may produce a chemical incapacity to digest food, as well as physiological depression of the digestive organs.

While it is an undisputed fact that free acid is present in the stomach, and that its presence is an essential condition of the action of the gastric juice upon the aliment, what that free acid is has occasioned much keen controversy. Some, as Prout, Tiedemann, and Gmelin, maintain that it is hydrochloric, while Lehmann and Heintz are of opinion that it is lactic. Sometimes there is free phosphoric acid present, or at least acidity is given by the presence of super phosphates, but only after the animal has been fed on bones. The result of eighteen analyses made apparently with the greatest possible care, has led Bidder and Schmidt to a conclusion which reconciles the conflicting views. They found that in carnivorous animals, after fasting for 18 or 20 hours, pure hydrochloric acid *alone*, without a trace of lactic, was present in their stomachs, whereas the stomach of herbivorous animals contained a certain small and variable amount of lactic acid, which was probably derived from the

food. We may assume, then, that the acidity of the gastric fluid in man, if normal, is due to the presence of free hydrochloric acid.

Of pepsine little is known chemically; it so far resembles albumen as to be coagulable by heat, and that it is indispensable for the action of the gastric fluid is a certain fact. Neither the acid nor the pepsine suffices alone, for if it be neutralized by carbonate of soda it loses its power and regains it when the alkali is removed, and equally destructive is the application of heat which coagulates and destroys the pepsine. The fact of an alkali destroying the effect of the gastric fluid, and instantly arresting its digestive power explains the mischief bile does when it gets into the stomach. It was found that a very small quantity of bile when mixed with the gastric juice at once and entirely suspended its chemical action upon the substances which it was vigorously handling before the addition. So that after all the phrase in every patient's mouth about being bilious may sometimes have a sounder foundation than we are apt to imagine.

Such being the constitution of the secretions from the stomach embraced under the designation of the gastric juice, let us proceed to inquire what is the character of its action upon the three constituents of all digestible food, viz., fat, fecula, and animal or vegetable fibrine.

Its only action on the fat is to dissolve the walls of the cells which enclose it, and to liberate their contents; by this fat is rendered fluid but undergoes no other change either physical or chemical.

The fecula contained in vegetable cellular tissue, as in a potatoe for example, is likewise enlarged from its confinement by the solution of the walls of the cells, and is brought into immediate contact with the gastric juice. The only effect of this upon the starch is to produce a hydrate either by its acidity or temperature. This is merely a physical change and not a chemical one, and its re-action with iodine is unaffected by it. Nor are the sugars affected materially, except that cane sugar if long exposed to its action is converted into grape sugar, and this in its turn into lactic acid. However, from the length of

time required to effect these transmutations, it is probable that they seldom, if ever, occur in ordinary digestion.

Its main work is with the azotized matters. A piece of flesh, for instance, when exposed to the action of the gastric fluid, either in or out of the stomach, is softened and transformed into a grey paste to which the name of chyme has been given. On examining this with the microscope, it is found that the change consists in the separation only of the fibres by the solution of the cellular tissue which bound them together, and that the original structure of the muscle is quite distinguishable, so much so that it is found to be much the best way of procuring the primitive fibres to expose for a length of time a muscular tissue to the action of gastric juice. This separation of the muscular fibre is much more rapid if it have been previously cooked, as was proved by experiments upon dogs. So that, in fact, a great portion of the work of the stomach as regards flesh may be anticipated in the kitchen. Milk and albumen it first coagulates then dissolves; bones it dissolves and removes from them their azotized portion which is very considerable, leaving behind the insoluble earths to be expelled. In this the action of the gastric juice is the converse of acid fluids which dissolve the earths and leave the animal parts of the bone. In all these instances the action of the secretion is strictly physiological, but it has also the power of acting chemically in virtue of its acid nature upon various salts.

Considering the wonderful energy with which it attacks and destroys animal tissues, the question naturally arises, Why it should not act upon the stomach itself? and the common reply is, that it is owing to the fact of the stomach being endowed with life which in some mysterious way preserves it from this otherwise inevitable suicide. That this is not the true solution of the difficulty is proved by some experiments of Bernard, who introduced portions of live frogs into the stomach of a dog and found that during the life of the unfortunate victim of science it was partially digested. And the explanation he gives is that the immunity to its own secretions enjoyed by the stomach is due to the epithelial coating which is quite impermeable by the gastric juice, and entirely resists its corroding power, and that

it is the absence of such a protecting film in the frog that makes it liable to be digested alive. This theory is probably the true one, and it may serve to explain the curious fact that the poison of the most venomous snakes may be received with impunity in its raw and native state into the stomach, while it produces rapidly fatal effects when injected into the blood. But it would be contrary to all analogy to suppose that because when in its concentrated state it did not act in the stomach being probably digested and decomposed, that therefore it would not do so when presented to the system in a diluted form, so as to be readily absorbed into the blood, or without this absorption to be brought into direct contact with an extensive surface of the mucous membranes on which nerves are largely distributed. This may re-assure us of the probable activity of snake poisons when given as we give them in a highly expanded or diluted state, even in the face of their inactivity, when swallowed in their natural bag, as is done in India.

Although it is established beyond a doubt that the gastric juice has the power of dissolving albumen, yet from the experiments of Bidder and Schmidt it appears no less certain that it requires a large quantity of the fluid to dissolve a small portion of the solid, a much larger quantity, in short, than is met with in the stomach. Not only in experiments made with gastric juice taken out of the body, but in all experiments made by dropping portions of coagulated white of egg into the stomach, through an artificial opening, they found without a single exception that even after six hours, and when there was an excess of gastric fluid present, yet that all the albumen was never dissolved, seldom more than half of it. This startling fact leads to the inevitable conclusion that albumen is only partially digested in the stomach, and we must follow the course of the food down the alimentary canal, before we can account for the digestion even of the albumen, the only one of the three parts of the aliment which undergoes a certain gastric digestion. The pultaceous mass, called Chyme, when it leaves the stomach and enters the duodenum, consists of disintegrated food, fecula, free oil, and albumen, in a state of solution, along with fibres of flesh, &c., before it has proceeded far on its downward course,

it encounters the secretions of the pancreas and the liver, which entirely change its chemical character, and arrest instantly the gastric digestion by throwing down the pepsine, and neutralizing any free acid that may have passed over. The action of the pancreatic fluid has hitherto been regarded as similar to that of saliva, and the pancreas has always been considered as an internal salivary gland, of comparatively little consequence in the process of digestion. Bernard entirely objects to this received opinion, and maintains that the action of the pancreatic fluid is of immense importance. This belief rests upon the following series of facts:—1st. The consequences of a destruction of the pancreas in the human body by disease. 2nd. Its destruction in animals artificially. 3rd. That the changes in the aliment, which he ascribes to the presence of this secretion, do not take place in the duodenum of those animals in which the pancreas discharges itself lower in the intestine until the point where this discharge takes place; and, lastly, upon the experiments he has made upon the action of the pancreatic fluid extracted from animals and brought in contact with the elements of food. In order fully to understand his views it will be necessary to state his experiments, as well as those of Bidder and Schmidt upon the same subject. Unfortunately the results are in some respects conflicting.

The pancreas is an oblong gland, with a duct running from one end to the other in a line with its longest diameter; as this central canal approaches the duodenum, where it debouches, it separates into two branches, the larger of which in man unites with the ductus choledochus, while the smaller empties itself separately into the intestines a little higher up. The same disposition of parts is met with in most animals, so that the bile and pancreatic fluid are at once mixed, and operate upon the food in combination with one another. The lesser duct instead of enlarging after its separation becomes smaller, and seems rather to serve the purpose of a reservoir than an outlet; in some animals it has a blind extremity.

The position of the pancreas makes it somewhat difficult to perform the operations upon it required for establishing its uses; however, this has been done, and the secretion collected

by means of a silver tube connected with an external receptacle. Bernard minutely describes the method he employed. On exposing the pancreas during digestion, it is found red and tumid, and if the duct is opened, the fluid escapes with such rapidity, that a moderate sized dog will yield 5 to 6 grammes in an hour. According to the calculations of Bidder and Schmidt, if the pancreas secretes at the same rate in the human subject as in the dog, a man of average size will elaborate 150 grammes of pancreatic fluid in the course of twenty-four hours. *Normal* pancreatic secretion is a colourless, limpid, and viscid liquid, which flows slowly in large pearly drops; it has no peculiar taste, but is slightly saline, like the serum of the blood. Its chemical reaction is always alcaline, never either neutral or acid. When exposed to heat it is converted into a solid white mass, possessing many of the properties of albumen. Notwithstanding this similarity there is no identity between the two, according to Bernard; on the contrary, the pancreatic fluid has altogether peculiar properties, as we shall see by and bye. In the mean time it is to be observed that this is true only of the *normal* pancreatic fluid, for there is an abnormal secretion from the pancreas. The liquid just described is only obtained in general for the first few hours after the operation, then if the animal exhibits symptoms of inflammatory action, or even great distress, the secretion from the pancreas is wholly changed, and instead of being viscid it becomes watery, and has a nauseous taste; it no longer coagulates with heat and acids, or at least the coagulation is very imperfect. It still exhibits an alkaline reaction, but is of much less density. Bernard considers that it is owing to the morbid secretion being so easily produced in some animals, as the horse, that we meet with so much diversity of statements as to its properties in the writings of different physiologists of equal authority; and he makes a more important observation to the effect that this is one of the distinguishing characteristics of pancreatic fluid from saliva with which it is commonly compared, for while we may take all sorts of liberties with the salivary organs, without affecting the chemical constitution of their secretions, that of the pancreas is, on the other hand, very easily disturbed, and the modifications induced in it

by pain or general derangement of the system entirely deprive it of its specific digestive properties. If this view be correct, it is not impossible that some of the forms of indigestion we meet with in practice arise from an organic or functional disease of this organ, and we may, perhaps, be able when we know its functions more exactly, to adjust our remedial measures with more precision and consequently with more success.

Without entering minutely into the chemical constitution of the pancreatic fluid which is given in great detail by Bidder and Schmidt, we may observe that it consists of from 90 to 92 per cent. of water, and of from 10 to 8 per cent. of solid ingredients; that of the solid part 90 to 92 per cent. consists of an organic matter which may be precipitated by alcohol and always containing a little lime, and the remaining 10 or 8 per cent. of that remainder is composed of salts of carbonate of soda, chloride of sodium, chloride of potassium, and phosphate of lime. This coagulable matter holds a middle position between albumen and caseine, possessing certain properties of both, but exactly resembling neither. Upon it the peculiar physiological virtues of the pancreatic fluid depend, for it is abundant or the reverse in direct proportion to the greater or lesser activity of the secretion. It seems to be of the nature of a ferment, and doubtless it is owing to its presence that one of the most marked and important of the functions of the pancreas is due. This function is the transformation of fecula into dextrine and sugar. The change of starch into sugar begins instantaneously when the pancreatic fluid is brought into contact with any amylaceous material, even at a temperature much below that of the living animal. Unlike the saliva which acquires its fermenting power by combining with the secretions of the mouth, the pancreatic fluid possesses the property in its own right. The full extent of its power in this direction has not as yet been accurately determined; it seems, however, probable that it is in general sufficient to account for the perfect digestion of the starch contained in the aliment, at least in so far as its conversion into sugar is concerned; and it is of importance to observe that neither bile nor gastric fluid has any appreciable influence in arresting or modiing in any way this function.

Bernard maintains that sugar to be digested must pass through the liver, and hence, that after the conversion of starch into glucose or cane sugar, it is absorbed not by the lacteal vessels but by the vena porta. In confirmation of this view he states, that when 2 or 3 grammes of sugar are injected into a superficial vein, so far is it from being assimilated, that it is actually rejected by means of the kidneys in the course of a few minutes; while, on the other hand, if injected into the vena portæ so as to be exposed to the action of the liver, it is perfectly assimilated, and disappears in the blood precisely as if it had undergone the previous gastric digestion. If this idea be true, we can now follow one portion of our original morsel of food from its entrance into the mouth until it is lost in the body. Entering in the form of a piece of bread or potatoe that is a succulent or starchy substance, it is first rolled about by the tongue, and well mixed by the process of mastication with the saliva and a small portion is converted into sugar, then it descends into the stomach where the sugar is changed into lactic acid; it passes on to the duodenum, where it encounters the pancreatic fluid, which rapidly converts the starch into sugar. This sugar is absorbed by the branches of the vena portæ, and carried to the liver, where it undergoes a sort of ultimate digestion before it is fit to be absorbed into the blood in such a form as to become subject to the action of the atmospheric air upon that fluid in the lungs, where it serves the purpose of fuel, and is, in part at least, consumed to maintain the vital heat of the frame. What other purposes it serves it would be beyond the scope of our present inquiry to consider. When it has once been assimilated by the blood it has passed from the region of chemistry into that of vitality, it is no longer aliment, but is become a living element, and not till after it has fulfilled its purpose and is cast out dead will it be subjected to a chemical inquest.

While there prevails entire unanimity among physiologists in regard to the transformations of the feculent portions of the food, and the agents by which they are effected, the case is very different with the fat, and on this subject the views of Bernard are novelties well deserving our earnest attention, but which we are

hardly yet justified in regarding as established facts. Such as they are we shall state them, waiving in the mean time till that is done the objections that have been advanced against them.

According to M. Bernard, one of the special functions of the pancreatic secretion, is to assist in the digestion of fat. The property this fluid possesses of transforming all fat and oils into glycerine and elaic, or some cognate acid, does not depend upon its alkaline character, but is an inherent principle, which it derives from its vital constitution; that is, the more pancreatic fluid presents its distinctive animal characteristics, the more rapid and decisive is its action upon oil; and so soon as it begins to assume its thin and watery appearance, it loses some of its decomposing power. If fresh, *strong* pancreatic fluid, be mixed with half its weight of olive oil, or fresh butter, or mutton suet, or pork fat, a perfect emulsion is formed when the two have been gently shaken together; and if the vessel in which they have been mixed be kept in a warm temperature, no separation takes place. It is found on examination, that the oils and fats have been decomposed into glycerine and a fat acid. This property of acting with such immediate energy upon oil and fat, is quite peculiar to pancreatic fluid, and is not found in any other secretion of the body. If bile, which is alkaline, be mixed with oil, at first it forms an emulsion similar to what we may call the pancreatic soap; but after having been left at rest for a few minutes, the oil rises to the surface, and the uncongenial union is at once dissolved. It is the same with saliva, gastric fluid, and the serum of the blood, only when saliva is very alkaline it succeeds in effecting a true emulsion with oils, but so soon as the alkali is neutralized by the addition of an acid, it entirely loses this power. This is not the case with the pancreatic fluid, which retains its influence over fat and oil after it has been deprived of its alkaline character by acidulation. The change it works is due to its own specific nature as an animal product, and not to its chemical constitution.

Such are the conclusions of M. Bernard, from experiments with pancreatic fluid out of the living body. They are confirmed by the following statements. If, he says, we trace the progress of the oil or fat from its leaving the stomach, we shall

find that until it comes in contact with the secretion from the pancreas it has undergone no change, except such as is the effect of the increase of temperature to which it has been exposed; but so soon as it has passed the orifice of the pancreatic duct, it loses all its old properties, and instead of oil, is a pultaceous creamy emulsion coloured with bile. He further states, that when these ducts are tied, so as to exclude the pancreatic secretion from the intestines, that this emulsion does not take place. It happens that in the rabbit the orifice of the pancreatic duct is placed some inches below that of the biliary duct, and hence it affords an easy mode of verifying the observation, if we ascertain whether or not the transformation of the oil into this emulsion takes place before it descends beyond the pancreatic opening. This seems a point which may be easily and certainly determined. M. Bernard accordingly made the following experiment: he introduced into the stomach of a rabbit which had been fasting for twenty-four or thirty hours, from 15 to 20 grammes of pork fat, previously liquified by a gentle heat, and then gave the animal its natural food of grass and carrots to force the fat down. In three or four hours the rabbit was killed, and the abdomen opened with all possible speed, when it was easily perceived that the formation of the fat into an emulsion, began to take place 35 centimetres below the orifice of the ductus choledichus, at the point where the pancreatic canal entered the intestines, and that not till this point were lacteals full of white chyle to be observed. This seems a most satisfactory observation, but unfortunately we have a counter statement by Messrs. Bidder and Schmidt to the following effect. They, too, gave several rabbits a dose of oil after a fast of twenty-four hours duration, and killed them at intervals of a diminishing ratio, from six hours and a half to half an hour after, when they found that in the majority of the instances, white milky chyle was to be found in the vessels of the mesentery, above the opening of the pancreatic duct, and they convinced themselves by microscopic examination, that this chyle did really contain oil globules. In short, the Frenchman and the Germans are at war upon this point, and we must wait for a new peace congress before we can hope for a final settlement.

As we cannot admit these experiments on the rabbits to be conclusive either one way or the other, let us consider the other methods of arriving at a knowledge of the functions of the pancreas, pursued by M. Bernard. The chief difficulty encountered by experimenters on this gland, is that its extirpation is attended with such serious injuries, that the operation is generally fatal. Hence, it occurred to M. Bernard to attempt its destruction, by means of injecting various substances into its tissue, through the pancreatic duct. After many failures, he succeeded in doing so with oil; a small quantity of this has the effect, when introduced into the substance of the pancreas, of causing its entire disintegration; and when the animal survives the immediate danger of the operation, we have then the interesting experiment of the effects of the withdrawal of the food from the influence of the pancreatic fluid, while it is exposed to all the other ordinary mechanism of digestion. Thus, on an old dog, Bernard performed the experiment with the following results. He injected about 4 cubic centimetres of mutton suet, liquified by heat, into the pancreatic duct. On the following day the dog drank a little milk; three days afterwards it eat some flesh; on the seventh day it was not so well, but seemed recovered upon the eleventh day, when the wound was quite cicatrized. On the twelfth day the dog got a pork chop, and also on the following day. The excrements contained a quantity of oil mixed with fecula; this oil had not been observed in them before the operation. Next day, again, he was fed on a pork chop mixed with boiled potatoe, and the same appearances were observed in the stools. The same diet was continued, and with the same results, that is, the stools contained an enormous quantity of oil and undigested starch, which reacted naturally with iodine. The experiment was persevered in for twenty-three days, and although the animal became much emaciated, there was no appearance of any more disturbance of the system than was to be accounted for by its inability to digest so large a portion of its food; and, latterly, the quantity of oil in the fæces diminished. It was killed on the twenty-third day; and on examination, nothing abnormal was found in the intestines, and the liver appeared healthy. The pancreas

was atrophied in a large portion of its extent, but in the centre there was still some which seemed healthy. The ducts were full of the suet which had been injected into them, and which had penetrated the greater part of the substance, and effected this destruction of its tissue, and consequent suppression of its secretion. M. Bernard made several other experiments of a similar kind, and the result was always the same, the destruction of the pancreas caused a large quantity of the fat and of the fecula of the food to appear in the excrements, and hence, the probable inference, that pancreatic fluid is one of the agents by which the absorption or digestion of fat and oil is effected. This view is further supported by the observation of diseases of the pancreas in the human subject.

Hitherto, the number of cases of unquestionable alteration of the pancreas verified by post mortem examination, and manifesting, during the life of the patient, inability to assimilate fat, that have been reported in medical literature, is perhaps hardly sufficient to establish so important a dogma. Some, however, are very striking, especially the following one, which rests on the high authority of Dr. Bright.

A man of 40 years of age, had long been subject to intestinal hæmorrhage, which, latterly, had become very severe, and attended with great sensibility of the epigastrium, alternating with diarrhœa. In the month of December, 1836, after having worked all day in a damp cellar, he was attacked with febrile symptoms and pain, obstinate constipation, followed by diarrhœa. The evacuations contained no bile, but a large quantity of blood, and there was excessive tenderness of the epigastric region. After the lapse of fifteen days, the presence of fatty matter was first observed in the excrements. For some months this appearance continued, the oil passed was in such quantity as to form a thick layer at the surface, which became firm after a time. It had the look of beef fat. The patient affirmed that for six weeks he had observed this fatty deposit to the amount of half a pound a day; but he was positive that it only appeared when he had eaten fat soup or meat. When he discontinued fat diet, the stools no longer presented this appearance, but at once resumed it when he returned to his fat food. Towards

the end of August, the existence of a painful tumour was discovered, situated in the epigastric and right hypochondriac region, extending as far as the umbilicus. He died suddenly on the 10th of September. On examining the body after death, a tumour, four inches in length and breadth, was found occupying the situation of the pancreas, the whole normal structure of which organ had undergone a change, having in fact wholly disappeared, while what remained was shrivelled up, and the whole substance was full of hard concretions. It was manifest that no pancreatic fluid could have been secreted. This is certainly a very remarkable case; but one cannot but regret that we have no mention of the effect of the disease upon the feculent food. Starch, as well as oil, should have been present in the stools, unless the intestines have the power of effecting a modification of these substances without the aid of the pancreas.

The following case is reported by Dr. Elliotson. A man of 45 years of age, complained of pain in the abdomen and back, and of diarrhœa. The pains were very violent, indeed, intolerable, notwithstanding the administration of opium: he lay doubled up in his bed, as he thought that gave him some relief. The evacuations were pale and covered with a yellow oily substance, which on being brought in contact with the fire burned with a vivid flame. On its first evacuation, this substance was liquid, but it gradually consolidated itself as an envelope round the fæces. Sometimes it appeared in large quantities, at other times it was absent. The patient got very emaciated before his death. On an examination of the body, the intestines presented a yellow oily appearance, with a number of black spots on some parts of their mucous membrane; the liver was healthy, the gall bladder full of thick dark bile. *The pancreatic duct, and its ramifications, were filled with white calculi.*

The fact of both these cases being quoted by M. Bernard and M. Fauconneau Dufresne,* is a sufficient proof that they belong to the curiosities of medical literature; and however

* Précis des Maladies du Foie et du Pancreas. Paris, 1850.

gladly we would accept of this explanation of the functions of the pancreas, we are forced to admit that we are not yet entitled to assume, as an established truth, that the pancreas is necessarily the organ by whose influence the assimilation of fat and oil is effected, although it is highly probable that it exerts some influence upon the process; notwithstanding the emphatic assertion of MM. Bidder and Schmidt, that they consider the Bernard-doctrine of the importance of the pancreatic fluid, in reference to its action upon the absorption of fat, altogether erroneous (in allen Stücken irrige); and that this secretion has nothing whatever to do with the absorption of fat, and its total sphere of action is the conversion of starch into sugar.

When such doctors differ, it would be presumptuous to dogmatize about the doctrine in question, and we must consider the mode in which fat is assimilated, as one of the out-standing problems. Bernard maintains that a chemical decomposition is effected by the pancreatic fluid, and that the oil-acid which is thus formed, is again neutralized by the free alkali of the bile. He also maintains, that while the sugar produced from the starch and the albumen both pass through the liver, being absorbed directly into the blood of the portal system, the oil and fatty matters pass into the lymphatic vessels, and with the lymph, form the chyle, that they do not pass through the liver, but into the blood as it enters the vena cava; that this is constant throughout the animal kingdom, and that those animals in which there is no separate chyliferous system, there is such a distribution of the veins as to allow of a direct communication between those of the mesentery, which receive the oil, and the vena cava, so as to enable the fatty part of the aliment to reach the lungs without making the circuit of the liver. Still the difficulty remains of how globules of oil pass into the lymphatic vessels or the veins, how they penetrate the membranes, which they must do, as there are no open pores, and while doing so, they must apparently violate the well established laws of endosmotic action; for if an emulsion such as that formed by the pancreatic and bilious fluid, and olive oil, be placed in proximity to a fluid of the consistence of blood, with an intervening animal membrane, it is found that the watery parts of the

emulsion are passed through the membrane, and the oil globules left behind. As we have before observed in speaking of the action of the bile, it seems probable that in some way the secretion facilitates the entrance of the oil. But notwithstanding many ingenious hypotheses, and much careful anatomical research by Professor Goodsir and other accomplished anatomists, the question of how one of the elements of all food enters the system at all, has not yet received a satisfactory answer. This uncontestible fact is the keenest satire we could pronounce upon the physiological school of medicine, who profess to be, now-a-days, so perfectly acquainted with the whole mechanism of the living organism, as to be able to put it right by suitable diet and regimen, and speak of regulating it, as a watchmaker talks about putting a watch to rights. We must remember, too, that in addition to their ignorance of the simple process of digestion, they are equally ignorant of the million influences which modify this, and every other vital phenomenon, forces within and without the body, infinite in number, incessant in their action, and ever varying in their degree.

We have now accounted for the fecula and the fat, the conversion of the former into sugar by the saliva and pancreatic fluid, its passage through the liver, and final absorption into the blood; while the fat after being liquified by the heat of the stomach, and the solution of the cellular tissue in which it is contained by the gastric secretion, is either absorbed by the lacteals, after having been formed into an emulsion by the bile and pancreatic secretion, or is partially decomposed by the latter into an oil acid and glycerine, and in either case is represented by Bernard to pass into the venous system directly without passing through the liver, and all that remains to do is to account for the large residue of the albumen which escapes the action of the gastric fluids and passes into the intestines in its original condition. The digestion of the remaining albumen seems to take place in the intestines. This fact is established by a series of experiments made by MM. Bidder and Schmidt.

These bold and indefatigable physiologists performed the following operations on 19 cats and 2 dogs. They opened the abdominal cavity, exposed the duodenum and jejunum, tied a

ligature below the orifice of the biliary and pancreatic ducts, and another some distance lower down; they then introduced into the intestine as high up as possible a piece of flesh and a portion of coagulated albumen, which they had previously carefully weighed, they closed the opening of the parietes with a ligature and let the animal go. The effect of this apparently most severe operation was very different in different individuals, some were quite exhausted by it, but others did not seem to have suffered at all, and went about as if nothing had happened. In the course of from 4 to 6 hours the portions of meat and albumen were generally advanced a considerable way in the intestines, and in every instance they had lost a considerable proportion of their original weight. To avoid any error from mechanical abrasure of their surface, they had been previously enveloped in a piece of lace or muslin, and as the experiments were all made after the animals had been fasting for at least 24 hours, there could be very little secretion from the stomach, liver, or pancreas present in the intestines. Hence, we are conducted to the inevitable inference that the secretion from the surface of the intestines acts as a solvent upon the albuminous portion of the food, and that the digestion of this element of diet begins in the stomach and continues through a portion at least of the alimentary canal.

The important action of this secretion is not confined to its effect upon albumen, for it appears to have the power of transforming starch into sugar, although it certainly does not do so with so much rapidity as either the mixed saliva or the pancreatic fluid. Still it was observed that whether when removed from the body or in situ, when an amylaceous preparation was brought in contact with the intestinal secretion, a change was speedily observed in the tint of the blue it struck with iodine which was sensibly paler, while on the other hand the tests for sugar revealed the existence of that substance. Thus we perceive that the feculent element of diet is the one most acted on, its chemical transmutation commencing the instant it enters the mouth, and continuing during its whole course through the alimentary canal, and in this progress it is subjected to the influence of agents which all effect its transformation into

some form of sugar, which in its turn is capable of being absorbed by the veins it encounters in every portion of its course.

We are now approaching the termination of our immediate object—a review of the recent investigations connected with digestion—and it is certainly disheartening to consider how few and meagre are the results of so much labour expended by men of so much knowledge and ability; it would seem that they have unsettled everything and settled nothing; the old established notions on which the chemical school have built so many imposing fabrics, with Liebig for master mason, are found to be a shifting sand instead of a sure rock; it is now quite certain that the animal organism possesses a chemical power of transmuting proximate principles; it is not true that the sugar, the fat, and the albumen are only absorbed from the food which must contain them if they pass thence into the living body; on the contrary, we now know that albumen is changed into sugar, and there is good reason for believing that a much larger quantity of fat is found in the body than entered the stomach, and most remarkable of all is the fact stated by Bernard, that if albumen from the blood, or white of eggs be injected into the veins, it is not *invested* by the body, but passed off by the kidneys to the detriment of the health of the animal. It would seem that a special elaboration of the aliment was required for the specific requirements of every individual, and that one man could never *digest* for another, if the term digestion is to mean not merely the cooking of the food in the stomach and intestines, that is dissolution, but its preparation into such a condition as to be appropriated by the body for its own reconstruction.

The new observations and conclusions are but the beginning of many that we may expect to follow, and in the mean time these will be a warning to us how we venture to dogmatize upon the subject of diet, for until we possess some certain knowledge what the body can make of its food, all reasonings upon the subject are likely to be fallacious. For example, it is positively affirmed that alcoholic liquids are innutritious, but can we be sure that alcohol may not be decomposed by the liver and converted into sugar or fat? Certainly, a few years

ago, if any one had asserted the transformation of albumen into sugar, he would at once have been mobbed by the chemists, and yet the chemical constitution of sugar is farther removed from that of albumen than alcohol is from fat.

The practical inferences to be derived from a general survey of the established facts and suggestions contained in the works of the physiologists are so clear that we do not need to prolong this paper by lingering over them. It is sufficiently obvious that if under the name digestion we embrace the total transformations that the aliment undergoes from the crude material that enters the mouth to the matters which are received into the blood to constitute the vital fluid, which penetrates all the organs, and affords to each its proper nourishment, and the elements out of which to fabricate its peculiar secretions, the process is a very long and complex one, and that its abnormal states known by the general term of indigestion or dyspepsia, may arise at any one of its many stages. It may begin at the mouth, there may be insufficient mastication and insalivation; it may be in the stomach, from a want of proper gastric fluid; it may be the pancreatic secretion that fails, or the liver may not perform its important and numerous functions satisfactorily; and, lastly, it may be that the membrane of the intestinal tube is incapable of performing its portion of the joint labour. Now it is obviously essential to a radical and rational system of medication that we should if possible ascertain the exact source of the disorder in any individual case of indigestion, and we may be able to do so better if we attend to the conclusions afforded by these investigations. Not only, however, will this careful application of physiological inferences enable us to attain greater exactitude in diagnosis and consequent selection of a specific remedy, but it will also assist us to some extent at least in a judicious arrangement of the diet. We observe, for example, that albuminous food, besides undergoing a gastric digestion, is dissolved and absorbed by the jejunum, and hence it follows that even when we know the gastric functions are too weak to perform the necessary changes upon animal food, we may give an ample supply of this nourishment to the body in the form of soup, in fact almost the whole of the work of the stomach may be imitated in a stew-pan. As for the feculent principles, we

have seen that there is no portion of their course from the mouth to their final disappearance, in which they are not exposed to the transforming process which makes them into a sugary compound capable of absorption except during their sojourn in the stomach. While fat and oils require for their admission conditions of which we are as yet very ignorant, but if the view of Bernard be correct, perhaps in cases where there is a manifest difficulty of digesting these in any of their natural forms, a substitute might be found in glycerine* or in some preparation of this substance. We are evidently on the threshold of many important discoveries in connection with the great practical question of how best to feed our patients, and we cannot but anticipate rapid progress in this direction now that the fact is beginning to be acknowledged by the advanced school of medical naturalists that the less the ailing body is tormented with drugs, and the more it is helped by a nice selection of proper food, the sooner and the safer will its health and strength be restored. The rude empiricism, that destroys the vital powers and perverts their functions in the wild hope that out of a general perversion and anarchy a conversion to order will eventuate, is rapidly passing away, and when a rational system of management by diet and regimen has been once fairly introduced, and its deficiencies made manifest, we may hope that the way will be prepared for the admission of a rational system of medication founded upon the great truths promulgated by Hahnemann.

CLINICAL NOTES ON SOME CHRONIC AFFECTIONS OF THE RESPIRATORY MUCOUS MEMBRANE.

By Dr. Black.

Chronic Ozæna, and Affection of the Throat.

A young lady, of robust appearance, the daughter of healthy parents, has, for nearly four years, suffered from constant yellow discharge from the nose. The mucous membrane looks red, and glazed. No tenderness of the bones of the nose is

* Dr. Chapman has recently directed the attention of the profession to the importance of glycerine as an article of diet.

perceptible. For two years she has complained of dryness and uneasiness in the back part of the throat, which looks glazed, with bright red slightly elevated patches here and there over the surface.

The general health is very good. She has taken a great variety of medicine, alteratives, tonics, applications of caustics, injections to the nostrils, and lately inhalations of cinnabar, but with no benefit.

March, 1855.—Kali Bichr. 6 and 3; cold water compress to throat; cold water gargles, and to draw cold water into the nostrils several times a day.

April 3.—Throat is better; K. B. 1, (1, 2), cont. water appliances,

K. B. 1 gr. iii. (1, 2,) Sach. lact. (3) K. B. A. gr. ii. (4).	Solve in aq. ℥ iii., sumat ℥ ss. ter in die. $\overline{2}$.*

May 1.—Writes that the throat is quite well, and nasal discharge much diminished.—Rept.

May 11.—Catamenial period checked; lips swollen; bowels costive. Sul. 6 gtt. vi. (1, 3); puls. 3 gtt. v. (2, 4).—Sol. in aq., ℥ ii., sum. ℥ ss. bis in die. $\overline{2}$.

May 29.—Better. No discharge from the nose on blowing it; sometimes a streak of blood; occasionally a slight roughness in the throat. Hep. s. 6, then Hep. 3.

June 27.—Much better. Rept. Hep. s. 3.

August 12.—Has taken no medicine for some weeks; the nose discharge has ceased, still sometimes streaks of blood, and throat very much better. Cat. delayed. Sep. 12, (1, 2); Sep. 6, (3, 4); sol. in aq. ℥ iii.; sum. ℥ ss.; bis in die. $\overline{3}$.

Oct. 2.—Throat and nose well, but tendency of catamenia to be delayed. Puls. 3, (1, 2); Graph. (3, 4).

The patient after this required no more medicine, and continued quite well when I next heard of her during the following winter.

Notes.—The improvement in this case was more rapid than I have generally observed in similar affections: the obstinacy of some cases is no doubt due to their dependence

* The figures between parallel lines denote the days of interval between the powders.

on scrofula or syphilis, or a mixture of both, with the addition of mercurial disease. According to MM. Trousseau and Laseque chronic coryza in children with a purulent secretion, often mixed with sanious matter, is a most diagnostic mark of constitutional syphilis, as no other disease, except small-pox, is attended by the same symptoms. This is probably too decided a statement.

Had the disease been principally confined to the throat, or extended to the larynx, I would have preferred Iod. Mer. to Kal. B.; the latter was chosen because it has a much more marked action on the Schneiderian membrane than the former, and it was also selected because the patient had lately been subjected to mercurial inhalations, and I therefore thought it better to discontinue mercurial action.

When the throat and larynx are the seat of the disease, I have found Iod. Merc. 1, in grain doses, given steadily for some time, of great use. Excellent clinical observations on this disease and medicine by D. G. Cook, of New York, are inserted in Hempel's edition of Jahr.

It may be asked, as K. B. was evidently so useful, why not resume it on the 27th of May, instead of Hep.? I cannot at present say why the K. B. was discontinued, but I fear the change to Hep. is an illustration of a too common fault with homœopathic practitioners—an over frequent change of remedy—a change made on very immaterial grounds. An error arising from a natural impatience to see speedy results, and often also from a misconstruction of the rule of regarding all the symptoms as the sole indication. In acute and chronic diseases, one medicine cannot be too steadily adhered to as long as its use is beneficial, and even persevered with in some cases when relief appears to be delayed, but where we have the conviction that the remedy is the proper one. Polypharmacy mars ordinary therapeutics, but does not frequent change of medicines also invalidate the records of the value of any special homœopathic remedy?

The following case has proved more obstinate: its report includes the use of other remedies.

A young lady, of a strumous family, married for some rs, but without children, caught cold in 1849, and since

then has suffered from a copious offensive discharge from the nostrils; this causes increased annoyance from its also falling backwards into the throat. Putrid taste in the mouth; offensive breath; oppression of chest; mucous râles; great flatulence, especially in large intestines; bowels very costive; leucorrhœa; eczematous eruption behind the ears; slight glandular swellings.

April 30, 1852. Sul. morning and evening for 10 days.

May 8th.—Leucorrhœa much less; otherwise the same. Kal. bich. 3.

May 23rd.—No change; Merc. 12, (1); Merc. 6, (2, 3, 4).

June 26th.—Sep. and Merc. alternately.

August 15.—Less leucorrhœa; b. regular; discharge from nose continues, but it is much thinner. Alum.

Sept. 6th.—Leucorrhœa ceased; bowels costive; fulness in head; flushing of face, &c.; still the discharge from nose. Zinc. 6 and 3; Graph. 6 and 3; Lyc. 12, 6, 3, were now given at various times, until the end of autumn, and the patient got so well as to require no further treatment. During the winter of 1853 she kept well, but when in Rome, in the spring, she caught a severe cold, and the discharge from the nose returned. She was then treated homœopathically, and took Graph., Carbo., Sul., Cal., Bar., but without much benefit. A report was sent to me, and June 30th I prescribed Aur. 12, 6, 3, to be taken, with an occasional interval, for six weeks, morning and evening.

August 30.—Writes reporting improvement, but still some nasal discharge, together with leucorrhœa: as Alum. had before been useful for the latter symptom, it was prescribed alternately with the Aurum. The former being given for a week, morning and evening, then four days to elapse without medicine, and the latter remedy to be taken in the same manner, and so on.

Oct. 20.—General health improved, but still discharge from nose; irritation of skin, especially of scalp; pityriasis. Ars. and Kal. b., and then Zinc., followed by Kal. bich., were given with benefit.

In Jan., 1855, it was again necessary to prescribe for the discharge from the nose, and leucorrhœa. Aur. 6, 3; Aur.

m. 1, and Thuja. 6, 3, 1, were given at various times to July. Treatment suspended until Dec., when for general symptoms Nit. ac. was prescribed with benefit; then Aur. and Thuja. were resumed. After this she took occasionally Staph. and Hep. for a spongy state of the gums, &c.; but Nov. 27, owing to a severe cold, it was again necessary to treat the nasal discharge, and for this I have found Kal. b. 3, 2, 1, together with a solution of Kal. b. A. gr. v. in i ℥ glycerine, applied locally, of decided service.

Notes.—It cannot be said that the patient is cured, but the general health is now excellent, and the discharge scanty, not offensive, and not falling into the throat. The medicines which appeared to be the most useful for the nasal discharge were Merc., but more especially Aur., Thuja., and Kal. b. The utility of the latter was increased by its local application. I observed that the progress of the case was more satisfactory after Zinc., Graph., and Lyc. had been given for some time. These three appear, from the symptoms in the Materia Medica, to act on the nose, but I doubt much the pathogenesis in the case of the last two; with Zinc. these symptoms are more decided, and in my experience therapeutically corroborated. But the principal indications for these three remedies were well marked in the dry scurfy state of the skin, especially of the scalp; the tendency to costiveness, attended with flatulent distension of the large intestines; the state of the uterus. In prescribing Aurum, I gave sometimes the triturated gold, at other times the chloride of gold. As far as I can judge, their action is identical, and if so, the latter preparation being soluble, saves the labour of trituration. Aurum merits more general employment than it receives. I have found it useful in the chronic enteritis of strumous children.

Might not the matter of glanders be tried in these obstinate cases of nasal discharge. I recollect many years ago giving it, 3 dil. in two cases, but at this distance of time I cannot report distinctly from memory: in one case, where the discharge was attended with polypus, I remember the polypus and discharge disappeared. Teucrium was also given, but whether the cure was to be attributed to the Teucrium or

Ozeine I cannot now say. Perhaps the cure was spontaneous, and the discharge an indication of the manner in which the polypus ceased to exist. I have, however, found Teucrium in other cases useful.

Independent of the irritation of the throat extending from the nose, there are two diseased states of it which may here be considered, as they not only excite cough, but frequently invade the larynx. In the one case the throat looks relaxed, the uvula œdematous, and pendulous, the mucous membrane a dark, dirty red, with dark swollen looking vessels covering it; streaks of mucus adherent to the back part of pharynx. The general state of the health indicates a congested condition of the brain and spinal chord; the brain easily exhausted; often occipital headache, with stiffness of the nape of the neck; easily fatigued; the digestive organs, with the exception of costiveness, generally normal; the exciting causes are generally over mental exertion and anxiety.

The remedies I have found useful are Arg. n., Bar., Hep., Phos., Nux., Ign., Lach., and Zinc.; and as intercurrent remedies Moschus and Bell. A diet generally devoid of alcoholic stimulants; sponging with cold water; one or two short cold sitz baths in the day; friction with oiled thumbs of the occipital region, this I have frequently found to relieve the head and secure refreshing sleep.

In the second case the condition of the throat may be said to be more active, presenting a granulated appearance, and disorder of the digestive organs. The urine generally loaded with urate of ammonia, and occasionally oxalate of lime. The following case may represent the disease.

A plethoric gentleman, about 50, has lived a hard life, partaking freely of brandy and wine; his health gradually gave way; he has been under several eminent medical men, who have, during the last three years, given him tonics, mercurials, purgatives, &c. His spirits first became depressed, and then signs of deranged stomach and liver shewed themselves, together with affection of the throat. The uvula was excised last autumn, with relief to the cough for a very short time. The arch of palate, and the throat are red, looking rough, and relaxed, covered with an adhesive mucus, which ap-

pears to be squeezed out of the follicles when the pharyngeal muscles are moved; a frequent short dry cough; constant hawking of phlegm; tongue dry, and dirty fur on it. Appetite good; feels a great sense of weight after eating; great flatulence; bowels costive; urine depositing copiously urate of ammonia; aching in the loins; great depression of spirits, with extreme irritability; the feet feel as if bruised, so that walking is painful.

June 11th, 1855.—Nux. 6, 3 and 2; water enema to relieve the bowels if necessary; dry friction at night, and to sponge with cold water on rising; wine to be restricted to 2 glasses, and vegetables to be more freely used.

June 26th.—Improvement in all the symptoms. Nux. continued a little longer, and then Kal. bich. 3 administered.

He kept improving until August 3rd, when his spirits became much depressed; the bowels costive, and frequent complaint of pain between the shoulders, and other signs of liver derangement. Iod. m. 1, failed to relieve this, but Bry. 1 afforded very rapid relief. This was continued for some time; and then Nux. v. 1, followed by Hep. 3, were given; by the middle of Sept. he was so well as to be able to remain a month without medicine. It was repeated October 16th, but, as during Nov. the symptoms remained stationary, Sul. 6, 3, 1, were given with very decided benefit until the end of Nov.; he then remained without medicine and in the enjoyment of much improved health until the cold winds in April excited a relapse. Nux., then Sul., with Bry., for a rheumatic attack, and Graphites, for irritable pain and excoriation round the nails of toes, were administered, and with great benefit. Since that period I have occasionally prescribed for gouty pains and stomach disorder, but the throat has kept well, though slightly affected during such attacks.

In affections of this description I give Alum., Ars., Aur., Hep., Caps., Carbo., Puls., Merc., Iod. m., K. b., Nux., Lach., Ign., Sul., Zinc. I have also found benefit from Colch., as an intercurrent. A water compress to the stomach is in many cases useful. In these affections there is often a

distressing cough, which is attributed to the elongated uvula; and as in the case reported the patient is urged to have it excised. This is an operation not to be encouraged; constitutional treatment will almost always restore the uvula to a normal state, at the same time as the general health improves.

Some surgeons so readily recommend excision of the uvula and tonsils, that it would be supposed such parts are merely ornamental to the fauces, and may be removed without inconvenience. This is a mistake, and their removal has led not unfrequently to a deterioration of the speaking and loss of the singing voice, or, as I have witnessed, to an extension of the disease to the larynx.*

Laryngeal Symptoms, attendant or dependant on hepatic disorders.

Master —, æt. 12, has not been strong since he had measles in March, 1856; his motions have for long been pale, but for the last three months more constantly so, and attended with pain in the region of the liver, especially on pressure and quick movement. Occasionally he suffers from an acute pain in the liver, shooting upwards, preventing him speaking while it lasts—about a minute. Tenderness of windpipe, also pain in it on swallowing; the larynx and trachea are sensitive when touched. Lach. 5, gtt. ii. bis in die.

Oct. 25th.—Decidedly better, but motions still very pale. Repeat.

Nov. 1st.—Improved in appearance, but still the pale clay-like motions; tenderness of windpipe when touched. Pressure on the liver at once excites the pain and uneasiness in the larynx. Dig. 1 gtt. iv, (1, 3, 5); Kal. bich. 2 gr. ii, (2, 4, 6); 2d. q. q. d.; Pulv. ss. m. et n.

* Since these notes were in type, I have read a new work by Dr. Guenau de Mussy on these affections of the throat, which he styles L'Angine Glanduleuse. As the treatise is interesting, I purpose making an abstract of it for the next number of the Journal. I may here state that the author following Chomel, regards the Herpetic diathesis as the cause of this disease. For *Herpetic* read *Psoric*, and we have a rediscovering of Hahnemann's views of chronic disease.

Nov. 12th.—Quite well. Continue medicine for a little longer.

Note.—It appeared to me, that in this case, the laryngeal symptoms were dependant on inactivity of the liver. Lach. was selected, because arrest of the secretion of bile, jaundice, and vomiting, are frequently observed in those bit by the snake. In the proving, there are also various laryngeal symptoms which may be characterized as resembling some of those met with in hysterical females, *i. e.* the peculiar sensibility of the larynx, and the sense of choking excited by very gentle pressure. After administering Lachesis, the general appearance and feeling improved, but no change in the peculiar laryngeal and hepatic symptoms; Dig. and Kal. bich. were then given, alternately, and with a very rapid and happy effect. I shall defer stating the reasons for the selection of these two remedies, until after narrating the next case, which, as it extends over several years, I must condense. A middle aged gentleman, residing in a relaxing situation, and much engaged, and often harrassed, in an extensive conveyancing business, has for long been delicate; suffering from colds, now and then asthmatic seizures, but principally from irritation of the windpipe, and impaired digestion. He has been long actively treated, but without benefit. His ordinary symptoms are,—loss of appetite, white tongue, occasional costiveness, dull occipital headache, exhaustion, sleeplessness, sense of uneasiness about right side.* In addition to these, he is very liable to attacks of

* There is a curious peculiarity in this patient: he of late years has been unable to eat red animal food for two or three consecutive days; if he does, the hepatic region feels loaded, and an attack comes on. Poultry, and fish, and eggs, he can eat with greater impunity, but even now, he enjoys the best health when he confines himself to a purely vegetable and farinaceous diet. I have frequently observed, that nervous delicate children, with a tendency to pale motions, improve much when meat is withdrawn from them, and their diet restricted to milk, bread, various farinaceous and vegetable articles.

In the case of this gentlemen, when much exhausted from a sharp diarrhœa, as he could not take stimulants, or solid meats, or broths, I fed him for some days (as I wished to give more stimulating food than bread and farinaceous things) on Liebig's infusion of beef, as recommended in cases of great

hoarseness, cough, gradual accumulation of viscid mucus, (which he refers to bottom of trachea) expectorated with difficulty: the ordinary symptoms increase, and the motions become pale and clay-like. The pulse, which is generally languid and slow, becomes a little quickened.

The tendency to the chronic symptoms, led me to prescribe Lach., Merc., Iod. Merc., Hep., Carbo. v., Magn. c., Zinc, Nit. ac.; these have been given from time to time, during a period of nearly five years. One medicine steadily administered for a month, to two months, with short intervals of rest; then long intervals without any medicine. Sometimes three and four months without medicine. The result has been a very decided improvement in the health, so that an arduous business can now be conducted, which at one time, he was obliged to almost entirely relinquish. The tendency of the symptoms, somewhat changed in the Autumn of 1855, becoming more acute, he came to me extremely exhausted, a copious watery diarrhœa had lasted ten days. No tenderness of bowels, utter loss of appetite, and depression of spirits. Verat. 3, had a very good effect; and then Rheum. 1, as also China 1. and a.

He has sometimes occipital headache: Lach. rarely fails to relieve this.

He has also had several acute attacks of pain and tenderness of the liver; furred tongue; quick pulse, and great weakness. These have yielded readily to Acon., Bry., and Iod. m.

But the acute attacks, to which he is peculiarly liable, resemble a catarrhal affection of the larynx, (as already described) and as such, they were at first regarded by me. The attacks yielded, or at least disappeared, while taking Spon., Hep., Iod. m., or Kal. b.; but in two attacks, where all these failed, Carbo v. appeared to be decidedly useful.

debility, when the stomach cannot digest, by Mr. Paget, in St. Bartholomew's Hospital.

Take of veal, beef, or chicken. chopped fine, half-a-pound,
„ „ hydrochloric acid, (strong) four drops,
„ „ water (cold) eighteen ounces,
„ „ common salt, a pinch.

After macerating for an hour, strain, using no pressure. The remaining meat may be treated with half a pint of water, and a second solution obtained. The solution does not taste acid, and is very palatable.

After a short experience of such attacks, observing that prior or coincident with the apparently catarrhal symptoms, there were signs of digestive derangement, especially the stools becoming pale and clay-like, I resolved to make these symptoms the starting point. With these views, I chose Dig. 1, and Kal. b. 2, to be taken alternately. The former has little proved action on the larynx, but possesses the power of so effecting the liver, that either bile is not secreted, or does not flow into the intestines, so that the fæces become whitish, and of clay-like consistence. Several medicines are entered as having such symptoms; but, judging therapeutically, I have the greatest confidence in Dig., and then in Kal. b. and Hep. In allopathic practice, such motions would generally be met by a mercurial preparation; but in a chronic ailment, such relief would only be temporary, as Merc. cannot, on the homœopathic principle, probably remove such a state, except where the substance of the liver, and the gall duct are congested or inflamed, so as to mechanically impede the secretion or flow of the bile. In homœopathic practice, Merc. is more indicated where there is an increased action of the liver. I believe that in the pale colour of the stools, there is more than hepatic derangement involved; but, for practical purposes, while we regret our ignorance of the whole diseased state, it is necessary to use such terms. The other medicine employed, was Kal. b.; it possesses all the hepatic, and also the respiratory symptoms. It is a medicine I like to employ, because its proving is so satisfactory, and not having been previously used in ordinary practice, every cure following its administration on homœopathic principles, is a proof of the efficacy of the homœopathic formula, a proof in the highest sense—the ability to predicate a cure. After prescribing these two medicines, the attack yielded much more readily than on any previous occasion, and the advantage then noticed, has been frequently corroborated. The patient whenever he finds the motions becoming pale, and the throat affected, at once takes the Dig. and Kal. b., alternately, and succeeds in cutting short the attack.

Why alternate? Why not give one medicine, and failing

that, the other? The remedies are alternated because I had previously found that the Kal. b. did not of itself act sufficiently quickly, and I felt, that if I could at once relieve the hepatic symptoms, the laryngeal attack might be arrested. I have observed in other somewhat similar cases, a like benefit from Dig. The alternation of remedies is to be avoided as much as possible. It is a practice apt to increase on one, if not guarded against, and it has an injurious effect, not only on the prescriber, but also in confusing the records of practice. There are, however, certain cases in which its adoption is quite consistent.

1st.—In chronic diseases, where we may fear that the continued administration of one medicine, even in various doses, may exhaust the susceptibility to its action; but where the susceptibility may be sustained, and thus relief afforded, by giving, alternately, another similar remedy.

2nd.—In acute and chronic diseases, where two different or independent groups of symptoms exist, and an appropriate remedy cannot be found to meet both.

It may be thought, that in choosing Dig., the direction to consider the totality of the symptoms, as the guide in selecting a remedy, was departed from. True, the pathogenesis of the other remedies covered more completely the great majority of the symptoms, but were wanting in one point,—the pale stools,—and this appeared to me a cardinal point, for the disorder seemed, in both the cases, to commence with the functions of the liver, and extend to, or sympathetically affect, the larynx. There can be no doubt, that in making a picture of the disease, as well as of the effects of a remedy, we are to employ all the assistance that physiology and pathology can impart. Using such aids, it will be found that it is of great consequence to follow the order in which symptoms have appeared. Sometimes one group of symptoms are all important, and their existence either excite or aggravate other groups. The more thoroughly we understand these substrata of morbid condition, the more readily can we compare the symptoms of the disease, with the physiological working of the remedy. It is a great mistake to regard the drawing a true picture of

the disease, and of the remedy as a purely mechanical act, with a repertory as the source of inspiration. It is a disregard of the true mode of viewing the directions of Hahnemann, as to the totality of the symptoms constituting the true image of the disease, and the remedy, that has given rise to so much cavil on the part of those who have written against homœopathy. While at the same time it must be admitted, that a blind observance of the letter, and not of the spirit of the law, has led to failures in homœopathic practice. Certain groups of symptoms not unfrequently stand to others in the relation of cause; it is to these causal groups, that the similarity must first be found, and then to what may be called, consecutive and sympathetic groups.

Cough, hoarseness, weakness of voice, &c., are of such frequent occurrence, in natural and drug disease, that unless the comparison be made scientifically, failure may be of frequent occurrence. For example, and a not uncommon one. A lady, suffers from great weakness of voice, sometimes hoarseness, sometimes aphonia. She looks pale, is easily exhausted; pulse feeble, rather quick, and on motion, jerking. No tenderness of larynx, no physical chest symptoms; but slight venous murmur in the neck. This state has come on since losing much blood. If the rule be mechanically followed, by consulting a repertory, then it is probable that such remedies as Ant.. Dro., Hep., Hydro ac., Lach., Phos., may be chosen; their administration would probably be followed by no good effect. Probably the same results would follow the use of Tart. e., which has loss of voice, with great exhaustion; but it is an exhaustion different in kind from that now present. But give China, and Ferrum, which have no such laryngeal symptoms, or Plumb., which has a few, (but its loss of voice is an attendant on the agony of colic,) and in proportion as the anæmia or the chlorosis disappears, so does the voice return.

A very stout lady, aged 60, has been repeatedly bled, locally and generally, and placed several times under the action of mercury, with great injury to her constitution, for frequent inflammations of the larynx. I have observed in this case, two kinds of attacks, very similar, but still re-

quiring different classes of remedies. First.—Pain in the larynx on breathing, with tenderness when pressed; voice hoarse, and can speak only in a whisper; breathing greatly oppressed; pulse quick, &c. Such attacks yielded very readily to Aco. and Spo., and the tendency to them, has much diminished since taking Hep., which was also indicated by the mercurial drugging. The second attacks are not attended by fever, or pain in larynx; they come on suddenly, with loss of voice, hoarseness, and a crowing noise, like that observed in children; a feeling of immediate suffocation; slight spasmodic affection of the limbs, and various symptoms of hysteric character. The first attacks are generally due to exposure to cold, the second to fatigue or mental emotion. In the latter, Ignatia affords speedy relief; were it to fail, I would try Ambra, or Moschus. In the latter, giving Spo., Hep., or Brom., would be loss of time; though the laryngeal symptoms are so urgent, and so similar to the first attack, still it is evident that the distress is due to hysterical disturbance invading parts, which, from previous disease, are liable to be readily impressed. One of these attacks, occurring in the country, led to a comatose state, and the patient, to her injury, was bled, blistered, and purged, leaving for some time after, an almost complete loss of voice.

Why is hysterical aphonia, when complete and unattended by uterine symptoms, so difficult to treat? Is it not because it is so difficult to form a true picture of hysteria, and still more to find a similar picture in the Materia Medica? Medicine after medicine is sometimes given without result; at last, the patient is left to herself, when suddenly, and unaccountably, the voice returns.

How varied are the causes of cough, and yet, without some idea of the origin of the cough, how difficult to choose the remedy. So difficult is it, that it were well for all who have the opportunity to record cases of cough, which apparently arise from other sources than simple catarrhal, or inflammatory affections of the respiratory organs. From such experience, *ab usu in morbis*, more light would be thrown on the physiological working of a remedy. Indepen-

dent of the inflammatory, catarrhal, and organic diseases of the respiratory organs, cough may arise from disease of the brain, from irritation of the ear, from disorder of the stomach, either sympathetically or from co-existing disease of the fauces and uvula; from disorder of the liver, from the presence of worms, from irritation of the womb; from enlargement of the bronchial glands, a cough so deep and spasmodic, as to resemble hooping cough; from disease of the aorta; from purely nervous disturbance of the par vagum, and this latter division is a large one, and often virtually means, that cough arises from a source of which we are not cognizant.

Cough Dependant on Irritation of the Ear.

A delicate boy, aged 6, introduced a glass bead into his ear; attempts were made by two surgeons, with various instruments, to extract it, but without avail; seeing the pain and distress excited by these attempts, I advised that no further effort be made, for the risk of inflammation could not be much greater than that from continued operations. Third day, fever, delirium, and slight cough appeared. Acon. and Bell. were given, and by the fifth day fever had partly abated, delirium gone, but cough much increased; a frequent spasmodic loud cough, preventing sleep, and distressing to hear. Chest normal; the ear inflamed and cannot be touched; fomentation continued to ear; glycerine dropped in. Merc. Puls. given, as also Bell., Con., Dro., Hyos., to soothe the cough, but without avail. Soon the ear discharged; the fever abated, and gradually the cough diminished, but did not entirely cease until about a month after the accident. The bead being still in the ear, but causing no pain, no discharge.

Note.—At the time of attendance I was not aware that such a cough could be due to the foreign body in the ear, as he had no catarrh, no affection of the chest. Some time afterwards, in reading Mr. Toynbee's admirable Clinical Lecture on the Ear, I found that a patient under his care, with a portion of dead bone in the meatus, suffered from a cough, which yielded to no treatment, but disappeared as

soon as the bone was removed. He considers the cough due to irritation of the auricular branch of the pneumogastric nerve. He notices another case where a child had chronic vomiting, which long resisted all remedies, but which was cured by removing a bean from each of the child's ears. I believe it would at first have been better to have left the bead undisturbed, or use simply the means Mr. Toynbee recommended, in preference to all instruments, frequent and patient syringing. As without doubt the inflamed meatus, &c., was the cause of the cough, it was a mistake to give Con., Dro., or Hyos., to check it, the true homœopathic remedies were those which could act on the ear, such as Acon., Bell., Merc., Puls.

Cough—from Irritation of Par Vagum, or from what cause?

A stout, healthy looking person, aged about 30, much occupied, and consequently confined to her shop, has for more than six months suffered from a deep, loud, spasmodic cough, which is excited if she talk beyond a few minutes to a customer, and if it occur after a meal, it is difficult to suppress the efforts to vomit; at other times it is often so severe as to excite dry retching.

General health good; functions of stomach, bowels, and uterus normal.

Dec. 8th, 1855.—Cupr. ac., 3, (1, 2); Cupr. ac. 1, (3, 4), Sol. in ℥ iv, sum. ℥ ss. ter in die $\overline{\text{I}}$. No change made in her diet or mode of life.

Dec. 20th.—No change; as catamenia were retarded, Puls. 3, was given.

Dec. 31st.—Ambra 3 and 1, given like the Cupr., and by Feb. the cough had wholly disappeared.

Note.—A theory is often useful, in this case the cough arose from no cause that I could discover, I therefore regarded it under the convenient term of a nervous cough, and out of the medicines producing a spasmodic cough I chose Cupr., from an idea that its cough is caused by direct disturbance of par vagum, and from a therapeutic value of it in other nervous affections, cough, asthma, &c. The Cupr. had

no effect, so that I gave Ambra, as it produces spasmodic cough, and because I have found it a good remedy in nervous habits. I doubt if Con., Bell., Hyos., Carbo., Dro., would have answered.

Cough with Gastric Disturbance.

A lady, aged 34, has had her health undermined by severe allopathic treatment, 10 years ago, for bronchitis: lately she has suffered much from excessive flatulence, and in proportion as that collects in stomach, so has she an incessant violent cough, sometimes almost exciting vomiting; if she talk a few minutes the cough is brought on. Tongue furred; throat red, and granulated looking; bowels very costive.

Feb., 1857.—Carbo. 3, gr. 1, ter in die. After six days cough lessened; throat less red; less flatulence; bowels act better. Cont.

March 2nd.—Cough has almost ceased; flatulence greatly diminished; bowels regular; tongue clean; throat is much improved. Cont. Carbo 3, bis in die.

(*To be continued*).

PROVINGS OF SULPHATE OF ATROPINE, AND CASES IN WHICH IT HAS BEEN EMPLOYED AS A REMEDY.

By Dr. Kafka, of Prague.

The physiological action of Atropine, which was described by Lusanna, in the Annal. univ., June, 1852, extracts of which may be seen in the Pragervierteljahrschrift Bd. 40, s. 7, as well as in the Wiener Med. Wochenschrift, and in the Homöop. Klinik, Jahrg, 1855; the observations and experiments of Prof. Schroff, on Belladonna and Atropine, which were published in the Wiener Med. Wochenschrift, Jahrg. 1851, No. 38, but especially the oral communications of the highly esteemed oculist, Prof. Arlt, upon the extremely rapid and truly surprising action of Atropine in causing dilatation of the pupils, induced me to undertake some provings, as well as to ascertain its value in practice. These experi-

ments are of too limited an extent to be held in particular estimation; but the results have been astonishing and favorable, hence I have considered it my duty to report my experiments and observations, hoping that they may give an impulse to further efforts which would doubtless prove of great value.

The first experiment was made by me on the 12th of September. I chose the Sulphate of Atropine which, according to the apothecary, is more soluble and as active as pure Atropine.

I am 46 years of age, of robust constitution, and am not subject to any other disease than muscular and articular rheumatism. I am generally of a serious temperament, and in society more lively, not at all disposed to ill-humour. My habits are very domestic; I love moderation in everything; live very regularly, and have never yet been intoxicated. My nervous system is easily excited, the stomach performs its functions well, but is disagreeably affected by depressing mental emotions, as well as by taking mineral waters or a strong cigar.

On the above day, at 10 o'clock in the forenoon, two hours after breakfast, which consisted of two cups of coffee and bread, I took 1-60th of a grain of Atrop. Sulph. In fifteen minutes after, I felt an uneasy sensation in the stomach, accompanied with frequent empty eructations, affording no relief. The uneasiness which gradually became associated with nausea and retching, increased to a pressing, sticking, and contractive pain, accompanied with frequent empty eructation. This spasm of the stomach, which was attended with paleness of the face, slight perspiration, ringing in the ears, and an aching pain in the forehead, lasted until 12 o'clock, when it was succeeded by a gradually increasing feeling of dryness of the mouth and throat, becoming so great by 1 o'clock that I could not speak a word, and my tongue was nearly adherent to the roof of my mouth. After taking a glass of water, which I was compelled to do, the sensation of dryness and general feeling of illness gradually left me, and by 2 o'clock all the morbid symptoms, excepting the dilatation of the

pupils, which supervened with the gastric pains, and which lasted two days longer, together with some paleness of the face, had entirely disappeared. On the 18th Sept. I took under the same circumstances, and at the same time, 1-60th of a grain of Atrop. Sulph., with exactly the same result.

On the 25th Sept. I repeated the experiment for the third time, and remarked the same symptoms.

This constant action of the Sulphate of Atropine on the stomach, which has not been mentioned either by Lusanna nor Schroff, but which clearly appears in the Belladonna proving of Hahnemann's, induced me to use this remedy in some disorders of the stomach.

The first case was that of an Austrian officer, who had suffered for four years from gastric disorder, and had consequently become deadly pale, and much emaciated. He vomited all he took, whether solids or fluids, sweet or salt, little or much. Immediately after eating he was usually seized with weight and pain at the epigastrium, with frequent sour eructations, retching, followed soon with vomiting of ingesta, which, without admixture of blood, or any other foreign material, was so acid as to set his teeth on edge. His tongue was thickly coated, appetite often considerable, sometimes absent; he had thirst after vomiting; bowels relieved once in 2 or 3 days; urine normal; the upper and lower extremities always cold; very thin; not at all œdematous. Sleep was much disturbed on account of frequent gastric pains, which often occurred with great violence each night, especially when turning in bed; pulse 80-88.

On examining the stomach, I found in the region of the pylorus, close to the umbilicus, towards the right side, a tumour nearly the size of the fist, yielding some resistance, very sensitive to the touch, moveable, easily pushed aside, and yielding a dull sound on percussion. The liver and spleen were of ordinary size, and the abdomen gave a clear sound at every point. The allopathic treatment, both in Italy and Vienna, proved of no benefit.

With such clear symptoms, who would not have considered the case one of carcinoma of the stomach?

On the 20th of November I gave him Nux vom. 2; a powder morning and evening; enjoined the strictest rest; entire relaxation from duty, and ordered milk diet—a glass of tepid milk, night and morning, and milk soup at noon. In a few days he was better; the vomiting, heartburn, and gastric pains lessened, and he continued the Nux vom. The scene, however, soon changed.

On the 28th, I was called in the night to our patient, who had been vomiting since the evening, and complained of the most insupportable pains in the stomach; his countenance was deadly pale, hands and feet cold, and covered with cold sweat. Pulse small, constricted, 120. He said he had taken cold.

I considered it to be a case of peritonitis, restricted to the pyloric region, probably caused by an ulcer of the stomach, which perforating the walls of the latter organ, reached the peritoneal covering of the pylorus, and there exciting adhesive inflammation, filled up the ulcer, and with further deposition of plastic material, as is ordinarily the case, caused a tumour not dissimilar to carcinoma. Keeping the peritonitis in view, I prescribed Bellad. 2, 10 drops in a glass of water, 2 teaspoonfuls every half an hour, at the same time cloths wrung out of hot water were kept applied to the region of the stomach. The result of this treatment was so far favourable, that the pains soon subsided, the warmth of the body returned, and the vomiting ceased.

The gastric symptoms, shortly after, remained stationary, and Bell., which seemed so strongly indicated, as well as Nux, which had at times been interposed, did not appear to have sufficient extent of action. On that account I resolved to employ Atrop. Sulph., of which, on the 10th Dec., I dissolved one grain in ʒ ij of spirits of wine, and ordered one drop (1-180th gr.) to be taken on sugar, night and morning. The result was so favourable in so short a time, that almost all the morbid symptoms gradually ceased, and even the tumour became softer and smaller. At Christmas he took a journey to Olmütz, and was so well, that his stomach would bear any kind of food. On his return, at the commencement

of January, he took cold, and had a relapse, but quickly recovered by the above treatment. The latter was continued, without any increase of dose, until the end of March, in the whole 4 months and 10 days. Since this time the patient has been quite well—looks astonishingly well—and there is only a slight trace of the tumour, a sign, that with diminution of the inflammatory action, the exudation at the pylorus has been, for the most part, re-absorbed.

THE SECOND CASE is that of a young married woman æt. 25, who, on account of her gastric disorder of 5 years' duration, has been under the treatment of the most celebrated practitioners in Prague, as well as in the General Infirmary, but without any benefit.

She is a blond, slightly made, and notwithstanding her long suffering still looks tolerably well. She throws up all she takes; her appetite is good, but as soon as she has eaten, nausea supervenes, with pressure at the stomach, constant retching, and empty eructations, followed by an emptying of the contents of the stomach. The matter vomited is not acid, but is merely the food just taken. The region of the stomach is very sensitive to pressure, the strictest examination with the fingers and plessimeter did not show any organic change of the stomach or adjoining parts. Menses, bowels, and urine normal. She had three children; muscular power moderate; not very thin.

The circumstance that neither the good looks of the patient, nor the slight emaciation, nor the quality of the substances ejected by the stomach accorded with the long duration of the disorder, and that the cause of the malady could not be attributed to erosion of the mucous membrane, to a perforating ulcer, nor to a carcinomatous degeneration, led me to an examination of the spine, which should never be neglected in such cases, especially as the patient complained of constant burning pains in the back, as well as under the sternum, and in the region of the stomach. I found a large portion of the spine so sensitive that the patient cried out on pressure being made, turned pale, and at the same time was seized with nausea, eructation, and retching. From

this I judged that the case was one of *cardialgia from spinal irritation,* and accordingly ordered cold applications to the spine, to be changed every half hour, the strictest rest, and *bellad. 2,* in sugar of milk, internally; a powder every four hours, and only permitted the patient to take weak soup three times in the day. This treatment was attended in eight days with a favourable result, for the pains, as well as the gastric symptoms, were considerably improved. From the continual use of *belladonna,* in three weeks the pains, and the sensibility of the spine had entirely disappeared, but there still remained behind weight in the epigastrium, eructation, and nausea after eating. The vomiting had already ceased for ten days. As there was no further improvement from the use of *bell.,* continued for fourteen days longer, and every moment an increase of the symptoms was to be feared, I had recourse to *atrop. sulph.* as before, 1-180th of a grain, night and morning.

The result was surprising; after four weeks employment of this remedy, all gastric pains, and other sufferings gradually ceased, and the patient began to take any kind of meat, and light farinaceous food.

This improved condition lasted for four months without any drawback. The patient was now subjected to constant mental anxiety, which caused unfortunately a return of the above gastric symptoms, which I was compelled to alleviate with *cham.* and *ignatia,* and at present she is again taking *atrop. sulph.,* and is already on the road to improvement. The treatment of this case lasted from the commencement of December.

THE THIRD CASE is a hyperæsthesia of the stomach, which in women is termed hysteria, and in men mostly hypochondriasis. An unmarried lady, 40 years of age, has suffered for six years from vomiting after eating. However careful she may be in the choice of food, yet after each meal she is sure to suffer from pressure and pinching in the stomach, retching, soon followed by vomiting of the food taken. She is mostly free from pain as soon as the stomach has emptied itself, until more nourishment has been taken. The matter

vomited neither tasted nor smelt acid, and was nothing more than the remains of the food mixed with bile. Her appearance is good, skin not pale, nor the muscular power much enfeebled. Her tongue is not coated, the natural functions are normal. The region of the stomach is sensitive to pressure, and shews nothing abnormal on the closest manual examination. The liver, spleen, uterus, abdomen, and spine are quite sound. The patient, as exciting cause ascribes her disorder to continued depressing mental affection. She has hitherto been under allopathic treatment without any benefit, and has been at Carlsbad for six weeks without the least improvement.

On the 20th Nov. I commenced the treatment with *ignatia*, and subsequently gave *nux* and *bell.* with but little benefit. The last remedy appeared to be the best, but its action did not seem lasting, nor sufficiently powerful. Therefore, towards the end of Dec. I gave *atrop. sulph.* as above, upon which the gastric symptoms improved surprisingly. At the commencement of Feb. she took only one dose, daily; and in March two doses, weekly. On the 10th April, that is to say, in five months, the cure was perfect.

I must here mention two cases in which I involuntarily, and unexpectedly happened to see produced the most prominent symptoms of Atropine.

The first was that of an old man, æt. 80, who had suffered for many years from induration of the stomach, and in consequence was tormented with most severe cardialgia. For years, he had been in the habit of taking 1-3rd of a grain of acetate of morphia, twice a-day, to alleviate his sufferings. I commenced the treatment with Atropine, which Lusanna has lauded as an anæsthetic, and in the idea that partly from his age, and partly from the long continued use of the acetate of morphia, there would be but little power of reaction in his nervous system, I gave him ten drops of Atropine (1-18th of a grain), in a quarter of a pint of water, two teaspoonfuls every hour. The patient was free from pain the first twenty-four hours, and was proud of his improvement; he had, however, considerable dilatation of pupils, and great dryness of the mouth and throat. By the continued use of Atropine,

on the second day, just the same symptoms appeared as described by Lusanna. Somnolency; confusion of ideas; hallucinations of hearing and of vision; difficult articulation; delirium, alternating with stupor; convulsive trembling of the muscles of the upper extremities; involuntary movements towards the head and genitals; subsultus tendinum; motes before the eyes; finally, involuntary, but scanty discharge of urine. Under these circumstances, I discontinued the further use of Atropine, and in about forty-eight hours the action of the latter had ceased, without leaving any bad symptoms behind. The gastric pains were absent during the action of the Atropine, but subsequently returned.

In the second case I had an opportunity of observing dilatation of the pupils after dropping a solution of Atropine into the eye.

A young, unmarried woman, 30 years of age, had suffered for six weeks from *neuralgia frontalis intermittens* of the left side. Quinine was used, lege artis, then Quinine with morphia, subsequently Veratrum, but without benefit; then with the view of benumbing the nervus supraorbitalis, a *solution of atropine* was dropped into the left eye. The pain still remained the same, but additional disorder of the organs of vision supervened, and I was called in. I found the right pupil contracted, and the left five times increased in size, there was only a slight trace of the iris visible. Vision, naturally, was very much affected, the patient could scarcely see at all with the left eye, and very little with the right one, which was very intolerant of light, and, according to the patient, threw out streams of light.

I found the neuralgia was accompanied with a decided nervous erethism, similar to that produced by Belladonna, and accordingly used that remedy.

In eight days the pupils returned to their former state, and the patient was entirely freed from her pains.

Resumé.

1. The action of *atrop. sulph.* is not actually different from

Bellad., but acts more rapidly and powerfully. On that account I believe that

2. Atrop. sulph. should be preferred in those cases in which *bellad.* does not act effectually and permanently.

3. *Atrop. sulph.* seems to possess very important curative power in those painful affections originating in inflammation, where the symptoms seem to indicate *bellad.* rather than *aconite.* With the subsidence of the inflammatory symptoms, the reabsorption of the exudation is very rapid.

4. In painful affections from spinal irritation.

5. In painful affections arising from a morbidly increased sensibility (hyperæsthesia) of some nervous branch, viz., of the ophthalmic, auditory, olfactory, vagus, and plex. solaris, of the uterus, and sphincter of the bladder.

6. In severe forms of meningitis, cerebritis, of tuberculous disease of the cerebral membranes, and hydrocephal. acut.; in some forms of epilepsy and chorea, as well as in typhoid and septic fevers.

As to the external employment, I have used a solution of atrop. sulph., 1 grain to one ounce of distilled water, or of spirits of wine and water, to be rubbed in locally, in order to alleviate topical pains, but without any good result.

In the form of ointment, 1 grain to ʒ ij, I have lately seen it prove of great service in a case of severe neuralgia of the perineum, of long standing, in a retired cavalry officer.

The dose of 1-180th of a grain is almost the largest which can be given without fear of inducing symptoms peculiar to the drug. It would be better to commence with 1-300th of a grain.

These are my own observations and experiments with *atrop. sulph.* I entreat, in the name of our healing art, which has hitherto so victoriously overcome the enmity and aspersions of our rivals, and which will certainly in time be *universally acknowledged* as the *only true and right one,* that the provings of *Lussana* may be carefully read and studied, and that further experiments may be undertaken with this remedy with which I have made a decisive beginning.

ON INHALATION IN DISEASES OF THE LUNGS.

By Dr. Camil Lederer, Vienna.

The fundamental principle, *similia similibus curantur*, requires that each new mode of employing medicine should be fully proved, both by physiological and clinical experiments. Skoda, Maddak, and other writers of the old school, have inclined to make use of inhalation, as a homœopathic remedy, in diseases of the lungs, and I beg to publish my experience with two remedies, one a composition of Lobethal's, the other, Nitric acid gas.

E. P., 28 years of age, a brunette, suffered, when a child, from enlarged cervical glands, and disorder of the chest, was seized four years since with typhus, followed by increase of the chest affection, cough and spitting of blood. Although this weakened her very much, yet she married two years ago, and spent the winter of 1853 in Italy, where she remained a twelvemonth, and returned strong and full of hope.

In the spring of 1854, she gave birth to a weakly infant; before the expiration of the month, she was seized with a violent cough, which, however, fully yielded after several weeks of homœopathic treatment, so that she became stronger and more blooming than ever. Notwithstanding every warning, she would go to balls, and other places of amusement. The natural result of these excesses was that she was seized, in December, 1854, with cough, and an affection of the chest, which first attracted attention, in January, 1855, by their being attended with fever. Her condition was as follows. The face was thin and sallow; cheeks flushed; eyes heavy, surrounded with dark rings; countenance anxious; neck long and thin, the jugular veins swollen; the colour of the skin, greyish yellow; the chest flattened and long; the intercostal spaces depressed; respiratory movements much accelerated, performed by the lower ribs and abdomen. Percussion yielded a dull sound in both the upper lobes of

the lung, anteriorly, as far as the second rib, and posteriorly, to the third rib. Auscultation shewed bronchial respiration in these portions, and vesicular mingled with mucous ronchus in the other portions of the lungs. The second sound of the pulmonary artery well marked; sounds of the heart normal; pulsation feeble and frequent. Abdomen compressed; frequent colic-like pains, and diarrhœa. Emaciation considerable; pulse small, frequent (100), quicker towards evening 110—120; skin dry and hot. Towards ten o'clock at night, a very troublesome tickling in the throat came on, followed by a violent cough, which shook the whole body. This lasted, with short intermissions of a quarter of an hour, until five o'clock in the morning. About this time, an abundant sweat would break out, and the patient would fall into a heavy sleep.

From the beginning of January to the 6th February, Aconite and Iodium were prescribed, internally, but without any result. On this day the remedy was prepared according to Lobethal's prescription: ℞ Iodi. puri gr. 1., Kali Iod. ʒ j, Aquæ distillat. ℥ ij. Lobethal recommends this mixture to be evaporated close to the patient. With this view, I poured 40 drops in a china saucer filled with hot water, and heated the fluid over an iron stand, under which was placed a small light.

The benefit in this case was astonishing, for after the evaporation of the 40 drops, the cough ceased, and was followed by comfortable sleep.

These evaporations were continued daily, with very beneficial effect on the cough and general health, so that in three weeks from the commencement of the inhalation, the fever and sweating had entirely ceased, and the cough was very much moderated. The least disposition to cough, could at once be restrained by evaporating a very small portion of the above mixture. This improvement lasted until the middle of May, when, through unfavourable weather, fever again made its appearance, the cough became more violent, attended with expectoration of viscid, reddish grey, offensive mucus. The expectoration, indeed, diminished by the

continued use of the inhalations, but respiration became more embarrassed, and at times, even asthmatic. The appetite failed, the powers sank, and death took place the 31st May 1855.

The conclusion that we should draw from this case, is that in tuberculous cases, the nocturnal paroxysms of cough and tickling in the throat, may be relieved by inspiring the vapour of Iodine and Kali iodat.

The second remedy which I employed to prove the utility of inhalations, was *Nitric acid gas*. The physiological results obtained by me, offer a correct representation of hooping cough. After describing the symptoms occurring in a healthy person, I will add some reports of cases.

As the gas begins to be developed, there is a prickling, tingling sensation in the nose, with frequent sneezing; as the gas increases in quantity, the lips feel as if covered, and give a very sour taste when touched with the tongue. On being inhaled, it causes a constant and violent cough, with whistling inspiration, redness, and sweat of the face and body; the paroxysm of cough increases so much, by continued inhalation of the gas, that it causes a taste of blood, nausea, and actual vomiting of mucus and food. Longer exposure to the gas apparatus causing oppression of breathing, and anxiety, so that it becomes necessary to leave the room, and breathe freely, in order to ease the cough. There remains behind, for from half-an-hour to two hours, great rawness, soreness, and weariness of the chest.

These symptoms occurring in a healthy person, evince the greatest similarity with those of hooping cough. Trinks has, likewise, in his Materia Medica, given the symptoms of Nitric acid, which closely resemble those of hooping cough. The employment of this gas in disease, again yields a remarkable proof of the truth of the law of similarity, as the following reports show. I must, however, previously observe, that the apparatus used by me in these physiological experiments, was Berzelius's lamp; an ounce of concentrated Sulphuric acid was heated to the boiling point in a sand-bath,

two drachms of powdered saltpetre were gradually added to the boiling liquid, and the gas given off while effervescing. I used the same apparatus with patients, only the quantity of the saltpetre did not, at the utmost, amount to thirty grains. In delicate individuals, a more simple method is to be recommended, although it may act more slowly. For this purpose, a drachm of Sulphuric acid may be poured into a porcelain saucer, and heated by the addition of an equal quantity of water, when from twenty to thirty grains of powdered saltpetre may be quickly added.

Baroness L., 5 years old, fell ill in July, 1855, shortly after her arrival in Vienna, with a catarrhal cough, which passed into hooping cough, after having associated for a fortnight with other children who had for months suffered from that disease. The paroxysms were very frequent and violent, especially at night, when the intervals between the paroxysms scarcely amounted to half-an-hour. The face was swollen, of a pale yellow; the conjunctiva slightly reddened; tongue coated; towards evening a dry, hot skin; pulse quick, from 120 to 130 in a minute; great debility. The attacks consisted in a constant, dry cough, with loud whistling inspiration; redness, sometimes blueness, of the countenance; stamping with the feet; grasping with the hands. At the end of an attack, which usually lasted from six to eight minutes, vomiting took place, with great weariness, so that the child would lie down, or, after some minutes, would resume her employment, or fall asleep.

The third day after having made the diagnosis, the first inhalation was taken in the morning; a scruple of *Kali nitricum* was evaporated in an ounce of Sulphuric acid, gradually, by means of a Berzelius's lamp. The patient remained a quarter of an hour in the room impregnated with gas. At six o'clock in the evening, another inhalation was taken. The paroxysms were less frequent during the night, and occurred at intervals of several hours. After the patient had used sixteen inhalations in eight days, the cough became extremely rare in the day, and, at the most, one or two

paroxysms in the night. The inhalations were now left off, and in eight days the child had quite recovered without any further medicine.

Mrs. E., 30 years of age, had suffered for two months, at night, from severe paroxysms of a dry cough, occurring frequently, every eight or ten minutes, the face at the same time being red, and ending in vomiting. The interval between the attacks extending, at the utmost, from a quarter to half-an-hour. Towards morning, there were pauses of an hour in length. During the day, the attacks recurred every two or three hours. As these symptoms showed great similarity with the physiological ones above mentioned, the Nitric acid gas was accordingly used, and nine inhalations sufficed to take away the paroxysmal character of the cough.

The son of Prince C—l, 11 years of age, in consequence of taking cold, was seized, in September, 1855, with a cough, occurring at night, in very frequent paroxysms; the dry cough lasted from six to eight minutes; he had also redness of the face, and nausea; a frothy mucus was all that was expectorated. The atttacks recurred almost every half hour during the night. Five inhalations sufficed to remove the cough.

The son of General W., 11 months old, affected with rachitis, was seized with a cough, during dentition, which gradually increased so much, that the attacks lasted from five to six minutes. The face became blue; the child struggled with its hands and feet, and had no rest at night from the frequency of the attack. On the third day, a single inhalation was taken, when the paroxysms entirely ceased.

Miss R., 18 years of age, belonging to a family, most of which had died from hooping cough, or phthisis, had hooping cough for the first time, when a child, then again, when 12 years old, and is now suffering from a cough, which in all its symptoms is very similar to hooping cough. The cough is dry, comes on in paroxysms, is attended with whistling inspiration, and with redness of the face, which is also swollen; the attacks come on most frequently and violently at night. After the cough had lasted about a week.

in February, 1856, the first inhalation was taken; the Nitric acid gas at once showed its power, for in the ensuing night, instead of from fifteen to twenty, there were only three attacks. Notwithstanding the rapid action on the nightly paroxysms, more than two weeks passed over, in which it was necessary to inhale the gas, at first, once daily, then every second day, before the cough was entirely removed.

The son of Professor H., 3 months old, very weakly, had a cough for eight days before the symptoms of hooping cough shewed themselves. The paroxysms lasted, often with intermissions, for six or eight minutes, recurred during the day every hour, and at night every half hour. The child had very little appetite, and it visibly grew thinner. The paroxysm consisted of a dry cough, interrupted by hooping inspiration, with blueness of the face, and towards the end, vomiting of milk, or a viscid white mucus. Drinking, laughing, crying, immediately excited the cough. After the paroxysmal cough had existed three days, on the 1st of March, 1856, the first inhalation was taken. An hour after, the attacks increased in violence and frequency; in twenty-four hours they had evidently diminished, for the paroxysms only occurred during the night, every three or four hours.

On the third day, he took the second inhalation; but in order to obtain a milder action, no artificial heat was used, but the effect was produced by the simple admixture of water with Sulphuric acid. An aggravation of the sufferings for a few hours again occurred, and was once more followed by a considerable diminution of the symptoms. After an inhalation of every second day, in the whole seven times, there only remained an ordinary catarrhal cough.

Princess L., 30 years of age, stout, and advanced seven months in pregnancy, had for several weeks suffered from a cough, occurring in paroxysms, which from their violence and frequency, caused her great distress when lying down at night. The cough, from its convulsive nature, likewise caused abdominal pains. The face becomes red during the attack, and the whole body is bedewed with perspiration.

At the end of [illegible] minutes, the attack is [illegible] by a white, [illegible] recurs every [illegible] five hours. In April 1856, the first inhalation was [illegible] which, as usual, caused improvement the first night [illegible] after eight inhalations, the attacks entirely disappeared.

The physiological symptoms, taken together with the therapeutic results, lead us to adopt the following [illegible] tions for the employment of Nitric acid gas. [illegible] cough, with hooping; [illegible] of face; sweat [illegible] with the hands; stamping with the feet; [illegible] ing; expectoration, viscid and frothy; aggravation [illegible] —a full description of hooping cough.

EFFECTS OF THE SULPHURET OF CARBON ON MEN AND ANIMALS.

By Dr. Jousset.*

Dr. Delpech recently read a very interesting paper before the Academy of Medicine on the disorders produced by the sulphuret of carbon in the workmen employed in India-rubber factories. This paper is doubly interesting, as treating not only of a great question of public health, but as containing valuable information concerning the pathogenesy of the drug.

Dr. Delpech has proved incontestably that the workmen exposed to the vapour of the sulphuret become, after a longer or a shorter period, the subjects of poisoning, and has suggested the means of preventing, as far as possible, the deleterious action of these vapours. This is a question of public health, and we have pleasure in acknowledging the substantial service accruing from the doctor's labours. But for us the interesting part of his researches concerns the effects of the sulphuret on man and the lower animals, and this will engage our exclusive attention. We shall first study the phenomena in themselves,

* From L'Art Medical, August 1856.

then the order of their succession and association, the circumstances which favour or impede their development, and finally shall inquire what are the morbid states which, under the law of similars, may be happily removed by this substance.

The Sulphuret of Carbon has been long known by the name of "Liquor Lampadii," and its medicinal qualities have been studied by Knaf. Numerous experiments on the healthy are recorded in the Augsburg Hom. Gazette, and the Leipsig Journal. Dr. Roth has collected and classed these materials in his new Materia Medica, so that Dr. Delpech might have found in this work, had he known it, the best support of his demonstration that the symptoms observed on his patients were due to the Sulphuret alone. The identity of those symptoms, and those recorded by the Germans is almost complete, only in Dr. D.'s the succession and association of the phenomena of poisoning allow us to study their true character, while Dr. Roth's description, confined to an anatomical classification, shows only isolated phenomena, often without character. Besides, Dr. D.'s work contains entirely new details concerning paralysis, alterations of the urine, and necroscopic appearances.

Before stating each phenomenon in particular, it will be useful to reproduce here a full statement of all those observed by Dr. Delpech. This will give a clear notion of the states induced by the inhalation of the vapours.

Case I.—Victor Delacroix, æt. 27, never seriously ill, of average constitution, and in good health, left the business of shoemaker to work on India-rubber, in 1853. This was to dissolve it in Sulphuret of Carbon, and with the solution to fasten joints or repair damaged articles, especially the soles of shoes. There is always much Sulphuret in the form of vapour in the room where he works.

For three months he suffered only from violent headaches; after that he was seized with general languor, intense vertigo, and weakness of sight, so as to be obliged to leave work after a few hours. Then he became deaf, and in a week's time could only hear a shout. This state disappeared, and returned after a certain time. His memory became weak, and he could not even remember where he laid down his tools. His disposition

changed too; he was at one time extravagantly gay, and at another would storm and rage about the merest trifles, breaking everything within his reach.

His sleep next became interrupted by frightful dreams or nervous shocks, and he had difficulty in falling asleep. Rigors, followed by heat, and profuse sweats, attended these agitations; even during the day he remained icy cold for hours, and then felt, as he said, as though he had been beaten or overwalked himself.

From the first his digestion had given way. He experienced sharp colics, frequent indigestion, nausea, and vomiting of green matters several times a day. Constipation, alternated with slight diarrhœa, with fœtid stools. The mouth was foul, pasty, and spitting frequent. The appetite declined, and his general strength also, so that he could hardly walk, and had to work sitting. The limbs were all equally feeble, and were from the first affected by transitory sort of cramps of the extensor muscles of the hands, effectually hindering, for the short time they lasted, the flexion of the fingers.

The manifestations of virility were completely abolished. His impotence was so entire that his wife made it a plea for leaving him. She, too, whenever she remained long in the room where her husband worked, suffered from headache and muscular weakness. She fell into a state very similar to his, but less serious, according to his statement; their child, brought in from the country, had only been three days in the workshop when he was seized with furious delirium, and rushed on his father to bite him. Nothing could explain this action of the child but the influence of the medium which surrounded him.

At length poor Delacroix, quite exhausted, determined on leaving his employment in March, 1854, and entered the Hospital of Bicêtre, of which I was temporarily one of the physicians.

At that time all the above symptoms were present; the patient was thin and pale, and his breath exhaled strongly the odour of the Sulphuret. He could only walk with a stick. His limbs were affected with sharp pains, and the muscles greatly shrunken. He resembled a man under the poison of

lead, the hands hanging prone, because of the weakness of the extensor muscles. The flexors were, however, also weakened. Muscular contraction was feeble and trembling, and he could not grasp anything strongly. When the arms hung down for a few seconds, the muscles were seized with a very marked fibrillar trembling.

Sensibility remained, as well as the power of muscular contractility under galvanism. We did not remark any diminution of the patient's intelligence during his short stay in hospital.

There was a very distinct, but intermittent "bruit de soufflet" heard in the vessels of the neck, which might have been anticipated from the general weakness and pallor. There was no organic disease, and he had only a very slight cough.

The treatment consisted of electricity, sulphurous baths, and Nux vomica during the few days he remained. The time was so short that I could not very decidedly say how far the treatment had been efficacious, though the muscular weakness had certainly been relieved. The cachectic state seemed not to have been appreciably amended.

The patient went to the country and adopted a tonic regimen. He remarked that solar light and heat relieved the pains in his limbs, and under these favorable circumstances his health improved during the autumn and beginning of winter. I saw him again in the following January, and was struck with his improved state; notwithstanding that, having resumed his occupation, he had also had a slight return of his old symptoms.

The muscular paralysis had completely disappeared, but the impotence had remained absolute, and the anæmia and loss of flesh were very remarkable. The headaches returned, and the patient, frequently seized with vertigo, was forced to leave his work abruptly, and wander about hardly knowing what he did. By working but a little he was able to remain in a stationary condition for a time, but the persistence of the symptoms obliged him to quit his employment once more, though he returns to it because the labour is light and the pay good.

It is to be remarked that although his intellectual faculties have not been seriously disturbed, he was subject last winter to fits of terror without any justifying cause.

In order to analyze the symptoms, we shall adopt the following order:

1st. Disorder of the intellect.
2nd. „ of the animal functions.
3rd. „ of the vegetable functions.
4th. „ of the excretions.

The lesions of the elementary parts, of similar parts, and organic parts being very few, we shall not study them apart, but shall indicate them in speaking of the regional disorders.

I. *Intellect.*

There are two orders of disturbance of the intellect: one an excitement having some resemblance to mental alienation, and a depression of the faculties very analogous to dementia. Of the first kind Dr. Delpech has pointed out an exaggerated gaiety, and anger carried to the extent of breaking and striking. These seem to be rare and almost exceptional phenomena.

The disturbances allied to dementia are more characteristic and constant: loss of memory, often complete: cannot find the right word, arrange ideas, fix the attention, write or read a letter:—these phenomena are met with in nearly every case. They are to be met with in Dr. Roth's compilation, detailed in nearly the same terms.

II. *Animal Functions.*

1. *Vertigo.*—In poisoning by sulphuret of carbon, this, with oscillation and proneness to fall, is a frequent symptom, coming on chiefly while walking. It has however presented other characters. In his eighth case Dr. Delpech says it came on at night, on awaking, with apparent turning of objects. Dr. Roth also has noticed vertigo occurring while sitting.

2. *Sleep.*—Dr. Delpech has remarked daily sleepiness only once; other observers have met with it more frequently. The disturbances of sleep consist chiefly of sleeplessness, or troubled slumber, with nightmare, starting, and painful dreams. This state coincides sometimes with sleepiness during the day.

3. *Special Senses.*—Dr. Roth cites the observatio prover, who had ringing in the ears for four days.

Dr. Delpech observed transient deafness once. Most observers have noted weakness of sight sometimes coincident with sparks. One of Dr. Delpech's patients became extremely near-sighted. The pupils are habitually dilated. Many of the people were haunted by the smell and taste of the Sulphuret. Other observers have remarked a sulphurous, acrid, pasty, bitter, or putrid taste. Buchner has observed diminution of the sense of taste.

4. *The Pains are very variable.*—We will speak of them in the various regions, but may remark generally that pressive pain predominates in the head, burning in the mucous membranes, and shooting in the limbs.

Painful sensations of fatigue, bruise, uneasiness, have been recorded by all observers. One of Delpech's patients felt præcordial anxiety.

5. *Motory and Sensory Derangements.*—According to Dr. Delpech, whose observations on this point are far more complete than those of the Germans, the motory derangements always end in palsy, which appears sometimes without any previous increase of muscular contractility. We shall examine these derangements in succession.

Clonic Convulsions.—Delpech has observed one case of habitual convulsion of the orbiculares muscles, and Roth a case of spasmodic motion of the corners of the mouth.

Cramps and Contractions, have been noted both by Delpech and Roth. In Delpech's cases the cramps affected the limbs, and attended the débût of a palsy.

Paralysis.—This is always incomplete, and limited to the motor nerves, more particularly of the extensor muscles, and is more intense in the lower than in the upper limbs, and often more on the right than on the left side. It is almost always accompanied by a trembling which appears when the patient tries to move the paralysed part, and sometimes ends in wasting of the paralysed muscles.

Sensation was found wanting but once and was then totally absent.

In one case Dr. Delpech observed a [illegible]

III. *Disturbances of the General Vegetative Functions.*

Dr. Delpech has often observed general loss of flesh, and an anæmic condition. Under certain circumstances he has also observed a rise or fall of the animal heat, but of this we shall speak more particularly when treating of the association of the symptoms.

IV. *Particular Vegetative Functions.*

1. *Dysphagia.*—Roth has recorded this symptom, but has not given its characters.

2. *Anorexia.*—With a single exception, all Dr. Delpech's patients completely lost their appetite. Other observers have recorded its increase or diminution.

3. *Thirst.*—One observer has noticed a strong thirst for beer. Delpech gives no information on this point.

4. *Nausea* exists almost invariably, but has no special characters.

5. *Eructation.*—The German observers have nearly all pointed to eructation as a constant symptom, having the taste and smell of the Sulphuret, besides special characters,—burning acidity (pyrosis), risings and puking of sour fluid.

6. *Vomiting.*—In Delpech's cases this occurred nearly always, the matters ejected are bilious and alimentary, and it was frequent either by day or night.

7. *Constipation* was frequent in Delpech's cases, the stools were hard, dry, black, lumpy, and sometimes smelt sulphurous.

8. *Diarrhœa* occurred oftenest among the Germans; was commonly serous, and sometimes mucous or stercoraceous; frequently exhaling the odour of the medicine, or a sour smell. Occasionally it alternated with constipation.

9. *Tenesmus* accompanies either the diarrhœa or the constipation.

10. *Flatulency.*—Roth has noted meteorism, rumbling, and [illegible] passage of much wind, having a very foul smell, or that of [illegible] drug.

[illegible] *rseness*, sneezing, without special characters.

[illegible].—Slight dry cough, caused by tickling in the [illegible]ation of the bronchi.

patient felt, on the contrary, coldness with aching. Other phenomena are, uneasiness, feeling of emptiness, shootings, and more or less severe aching.

Hypochondria.—Burning pains in the right hypochondrium. Undefinable quivering sort of pain in the hepatic region: attacks of shooting in the right hypochondrium.

Umbilicus.—Colic and gripes. Sometimes sharp shootings towards the bladder.

Iliac regions.—Shooting pains, mostly on the right side.

Hypogaster.—Shooting, gripes, colicky pains.

Genitals.—Shooting, drawing pains in the left testicle.

Sacrum.—Pressive and shooting pains.

Upper limbs.—Shooting drawing pains extending the length of the arm; or fixed in spots: as, *e. g.* in the deltoid, or the radial end of the biceps. Various aches; itching; papular eruption, or urticarious rash have been noted in the forearms. The joints of the arms are habitually the seat of shooting pains.

Lower Limbs.—The pains are of nearly the same character as in the arms; sometimes a shooting pain travels down the course of the sciatic nerve. There is much itching, which easily extends to the rest of the body. The eruptions, colourless at first, become red, and then assume the aspect of itch. There have been transitory boring or shooting pains observed in the joints and synovial bursæ in this region.

Action on Animals.

We have not thought it [illegible] in the same paragraph the effects pr[illegible] on animals, and those ob[illegible] the results which Dr. [illegible] unfortunately too few [illegible]

In two pigeons [illegible] istic symptoms we[illegible]

A rabbit was a[illegible] This paralysis, mor[illegible] members, was preced[illegible] sibility was retained.

The animal, withdrawn from the action of the sulphuret of carbon, had completely regained its health at the expiration of twenty-four hours.

Again exposed to the exhalation of sulphuret of carbon, the same rabbit had some convulsive movements, incomplete paralysis, more marked on the right than on the left side; the respiration became very slow, the pulse disappeared completely, and the animal died, after screaming out most piercingly.

On dissection, the following lesions were found: the brain soft; the lungs very pale, an ecchymosed spot on the thick part of the left lung; the *right side of the heart* gorged with black clots of blood "strongly coagulated, without fibrinous transformations. These clots of blood appeared to adhere on some points." The *left side of the heart* also contained coagulated blood, but in less quantity. The *liver* also was congested.

The *mucous membrane of the stomach*, in the great *cul-de-sac*, "presented a great number of ecchymosed spots, having exactly the appearance of purpura."

The urine contained no albumen, but it was coloured red-brown by potash and caustic lime.

Association of symptoms.

The *vertigo* is frequently accompanied by nausea, cold sweats, troubled sight, and faintness. The nausea is sometimes violent even to vomiting.

Pressive cephalalgia also sometimes accompanies the vertigo.

The want of appetite is habitually accompanied by an acid, sulphurous, disagreeable taste.

The nausea is often associated with embarrassment in the head, pressure in the stomach, risings in the stomach, and yawning.

The *diarrhœa* is preceded by colic and borborygmus, sometimes it is accompanied by vomiting, sometimes by burning at anus.

frequently exists without diarrhœa. It is some-
by tearing colic, and is followed by a fixed
the cœcum; at other times it causes a

pressing desire to urinate. Sometimes it exists with a sensation of dryness in the throat.

Cough. A cough has sometimes been observed preceded by irritation in the buccal and pharyngeal cavity accompanied by contractions in the larynx, and bringing on vomiting.

Febrile symptoms. Dr. Delpech has on many occasions observed true nocturnal paroxysms of fever. These attacks sometimes exhibited the three stages: shivering, heat, and profuse perspiration; sometimes they were characterized by agitation, rapid pulse, and perspiration.

Professor Bouchardat has observed febrile attacks in workers in caoutchouc, during the day, and after their labour.

Order of succession of the phenomena.

In all the observations of Dr. Delpech, the symptoms succeeded each other in an unvarying manner. The intoxication, cephalalgia, and gastric symptoms appear together; then, after a variable period of time paralysis is developed; the emaciation and the other signs of cachexia do not appear until later. Constipation precedes the diarrhœa, which, however is frequently absent.

The symptoms have a tendency to disappear in the same order as they appeared, that is to say, the vertigo and anorexia have for some time ceased to exist, before the paralysis and symptoms of cachexia have undergone, so to say, any modification. Impotence is a symptom which persists a long time.

Circumstances which aggravate or diminish the symptoms produced by sulphuret of carbon.

Actions. The action of reading aggravates the cephalalgia, augments the confusion of the ideas, and sometimes causes dull stitches in the globe of the eye.

Pressure aggravates the pain in the stomach, and the colic; compression of the abdomen occasions a general feeling of uneasiness.

The respiratory movements, and the action of bending the body, which exercises a pressure upon the abdominal organs,

aggravate, the first, the pains in the bowels and stomach, the second, the pains in the bowels only.

Movement also aggravates the colic; it augments the cephalalgia. The action of pressing the foot firmly against the ground produces the same result.

The *action of stooping* augments the headache.

Ingesta. Wine augments the cephalalgia.

Coffee provokes nausea, expectoration, and even vomiting; it occasions passing lancinations near the sternum, on the left side (cardiac region).

Eating diminishes the greater number of the symptoms, even the vertigo and fulness of the stomach. It aggravates the colic.

External influences. The *open air,* like the action of eating, ameliorates the greater number of the symptoms, the cephalalgia and feeling of uneasiness in particular, are diminished under this influence.

Heat in general diminishes the pains in the limbs. The *heat of a fire* in some degree reanimated the rabbit poisoned by Dr. Delpech. The heat of the bed aggravates the pains in the teeth.

Cold on the contrary diminishes these same pains.

The influence of the different hours of the day has been little studied. Nevertheless it is more especially at night that the febrile symptoms have been observed; in some cases the colic and uneasy sensation manifest a preference for the morning. The pains in the teeth are more violent morning and evening.

Duration of action. Königshofer has fixed the duration of the action of sulphuret of carbon at eighteen hours only.

In the experiments made upon a rabbit by Dr. Delpech, we have seen that at the expiration of twenty-four hours all the symptoms had disappeared, and the animal seemed to enjoy perfect health. But it is not so when the poisoning, instead of being effected rapidly and by the aid of strong doses, takes place slowly and is practised by means of small doses repeated every day. The observation No. 7 in the work of Dr. Delpech offers us a remarkable example of the duration of the action of sulphuret of carbon in cases of chronic poisoning. This man

entered the hospital Necker on the 14th November, he was not submitted to any treatment, and on the 10th of December the symptoms of sulphuret of carbon had not completely disappeared.

Antidotes. We are not yet acquainted with any medicinal substance which merits the name of antidote to sulphuret of carbon, and the observations of Dr. Delpech furnish us with very incomplete information on this matter. Thus, we have seen the patient, the subject of observation No. 7, recovered without treatment in twenty-eight days: from observation No. 4 we perceive the patient was cured by Strychnine in three months: from No. 5, the one cured in two months and four days, was treated by Strychnine and electricity. The woman who was the subject of the 8th observation, was treated in the first instance by vapour baths, remained ill on the fifty-fourth day. We have no information on the treatment of the other patients. Dr. Delpech has stated that *nux vomica, ignatia, strychnine, brucine,* and *rhus toxicodendron,* ought to cause the disappearance of the symptoms produced by sulphuret of carbon: but we have already remarked this opinion has by no means been confirmed by observation.

Therapeutic employment of sulphuret of carbon.

Sulphuret of carbon has been employed in medicine since its first discovery. It has been principally prescribed against rheumatic affections, but mixed with other drugs. The followers of Hahnemann also have sometimes employed it, and according to Dr. Roth the following are the morbid states in which sulphuret of carbon has been found efficacious. These morbid states are but imperfectly defined, and we can only transcribe here the terms which Dr. Roth has employed to characterize them.

Shooting and tearing in the right cheek, during two months.

Chronic diarrhœa coming on periodically every six weeks or two months; colic; yellowish, frothy, sour smelling evacuations, tenesmus.

Three cases of impetigo situated on the back of the hand.

Great disposition to rheumatic pains; rheumatic pains in different parts of the body.

Swelling of the uvula, and soft palate.

Frequent sour regurgitations.

But if clinical observations on the employment of sulphuret of carbon are as yet excessively meagre, the history of the symptoms produced by this medicine upon man in health, furnish us with positive indications for administering it in some excessively grave chronic maladies. We are desirous to describe these indications in order that every one may submit them to the test of observation.

Four morbid conditions seem to us to correspond principally with the whole group of symptoms produced by sulphuret of carbon. These are;—*diabetes, mental derangement, paraplegia* and *impotence.* We do not pretend to limit to these four affections the number of the morbid conditions which may be acted upon favourably by sulphuret of carbon; but we believe they present more than any others a great analogy with the effects produced by this medicine.

Diabetes. The presence of sugar in the urine of men and animals submitted to the action of sulphuret of carbon, is an important fact, and which naturally indicates the employment of the liquor of Lampadius.

In diabetes mellitus we must remark however that the symptoms furnished by this medicine do not correspond in so formal a manner with the symptoms of diabetes; but that perhaps depends upon our knowledge of it being as yet incomplete. Thus the phenomena relative to the quantity of urine, to the hunger and thirst, have been little studied; the state of the kidneys and liver have scarcely been examined. Nevertheless, here are symptoms analogous to those of diabetes, contained in the actual history of sulphuret of carbon:—Sensation of fatigue; Emaciation;—Excessive thirst for beer;—Increased appetite;—Impotence;—Abundant urine;—Saccharine urine;—Congested liver (in a rabbit).

Mental derangement. The symptoms produced by sulphuret of carbon which indicate this medicine in mental derangements, and particularly in mental derangements with paralysis, are the following:—Loss of memory with impossibility of associating the ideas, fixing the attention, or finding the proper word;—

Vertigo and intoxication;—Sleepiness during the day;—Incomplete paralysis affecting the limbs, more intense on the right side than on the left, and accompanied by trembling;—Dysphagia;—Impotence. The paralysis of the tongue and stammering which accompanies mental derangement with paralysis, have not been observed amongst the symptoms produced by sulphuret of carbon.

Paraplegia. Sulphuret of carbon produces symptoms of paraplegia. The following particular characters are presented by them, and which may serve to determine its indications in paralytic affections.

It is above all a paralysis of the motion; it is accompanied by muscular atrophy and trembling; it is principally seated in the lower limbs.

The paralysis is always incomplete; never, to the present time has it affected either the sphincters or the respiratory muscles; it is sometimes accompanied by painful weariness and cramps at the commencement of the malady.

Impotence. It is in cases of impotence with cessation of venereal desire and absence of seminal emissions, that sulphuret of carbon would be suitable.

Dr. Tessier has already prescribed sulphuret of carbon several times in diabetes and paraplegia; but the small number of patients who have been submitted to this method of treatment, and the shortness of time which has elapsed since our attention was directed to this medicine, do not enable us to arrive at any conclusion.

In concluding this article, we will point out how closely the history of the effects produced on man in health by sulphuret of carbon, resemble, in respect to the multiplicity of the phenomena, the history of other substances contained in the works of Hahnemann; nevertheless almost all these phenomena are found reported in the memoirs of Dr. Delpech. It cannot therefore be said that this is the work of some hypochondriac or weak-minded prover, who has mistaken his habitual sensations for medicinal effects. Dr. Delpech has therefore brought forward a new testimony in favour of the pure Materia Medica; and, although this result might be far from his intention, we do

not thank him less for this stone which he has added to the work of the establishment of experimental therapeutics, and to complete his labour, we would solicit him to attack the question of the therapeutical application of sulphuret of carbon, in following the law *similia similibus curantur.*

REVIEWS.

Edinburgh Essays, by Members of the University, 1856.—III. *Homœopathy.* By WILLIAM T. GAIRDNER, M.D., Lecturer on the Practice of Physic.—Black, Edinburgh, 1857.

WE rejoice to see the University of Edinburgh rousing herself for the race of honour, and in imitation of her rivals in England, displaying, by the publication of her essays, that there is yet life and vigour within her walls and among her graduates. At first, we acknowledge, we felt some surprise that this commencement of a great literary enterprise on the part of so distinguished a university should be inaugurated by an essay on the *negative* side of a great question in an advancing science such as medicine. But further reflection, and a glance at the other essays in the collection, convinced us that this was just as it ought to be. These essays are all, more or less, of the review character; criticisms of the opinions of the day on classical or literary subjects, expositions of the actual state of some branches of science, biographical notice of an Edinburgh professor lately deceased, in fact, popular subjects treated from the Edinburgh point of view. They might have all appeared in the *Edinburgh Review*, and would have done so, perhaps, had not that quarterly publication become more a London than an Edinburgh periodical. Therefore, it was but right, when a medical essay was resolved on, that the most popular question connected therewith, should be selected; and, moreover as quite right that the Edinburgh University view of the stion should be set forth. We can look forward to the me when the great revolution in medicine commenced by

Hahnemann being completed, say fifty years hence, it may be a matter of interest to some to know what view the reigning Edinburgh medical powers took of the innovations of the great medical reformer half a century previously, and to such the *Edinburgh Essays* of 1856 will afford precisely the information they seek. The superior character of the essays generally is likely to save this volume from the usual fate of ephemeral literature. In that case, Dr. Gairdner's essay will, in future years, be useful as a land-mark to show us how far we have advanced since it was written, and therefore we heartily rejoice that the University of Edinburgh has, as it were, here issued a manifesto of its actual views in regard to this subject. So far, then, are we from finding fault with this essay for being opposed to what we believe to be the truth in medicine, that we confess it would have been an anachronism to have published an essay in favour of homœopathy in a volume purporting to represent the opinions of the Edinburgh University, in the Medical Faculty of which we know that homœopathy is as yet professed by a very small minority.

We had misgivings about Dr. Gairdner being the very best spokesman for the University on homœopathy, as our previous experience of his writings on this very subject had not inspired us with a high idea of his temperance and courtesy. But, be it owing to the good company he has been admitted into, or to some years of further reflection on the matter, or whatever other cause, certain it is, we observe a great change for the better in his style, and we tender him our congratulations on his improvement. So, as Dr. Gairdner has been selected as the exponent of the views of the Faculty of the Edinburgh University, we do not hesitate to accept him as such.

The general tone of the essay, we are glad to perceive, is a decided step in advance in the controversy, and the question is treated of without that affectation of contempt which has hitherto been the fashion with the Edinburgh school. On the contrary, it is now discussed like Brunonism or Broussaisism, or any other doctrine or practice strictly within the pale of medicine, which the critic thinks indeed

erroneous, but deserving attention, and requiring all his powers to combat. Such treatment, though nothing but bare justice, we accept as an *amende honorable* coming from Dr. Gairdner, and we will therefore ignore all his antecedents in this very controversy, and endeavour to meet his arguments as dispassionately and with as few personal allusions as possible. We shall, therefore, follow the example of our author, and plunge at once *in medias res.*

He begins, without any prefatory remarks, with a quotation from the introduction of Hahnemann's Organon, wherein is concisely embodied the enunciation of the homœopathic principle. He then proceeds thus:

"In the above extracts we strike, as it were, the key note of the passage in the history of medicine which it is proposed to examine in this article. We are enabled, in particular, to appreciate two of the characters by which it is distinguished. Homœopathy is a *universal* and *exclusive* system. It professes to meet the case of every curable disease, and to be the only method by which diseases are curable. It assumes, in other words, to have reduced the entire cure of disease by medicines, to a single therapeutic law, and it puts forward that law as a new discovery. In submitting ourselves, therefore, to the guidance of homœopathy, we cannot avoid rejecting all other medical doctrines, in so far as they relate to the action of remedies. We are led to the conclusion, that medical truth is a thing of yesterday: that up to the promulgation of the homœopathic law, the cure of disease was the result of accident, or of a blindly working and fluctuating experience, but that it is now based on principles as secure as they are simple, and requiring for their application, only an exact knowledge of the properties of drugs on the one hand, and the symptoms of disease on the other."

Let us observe, at the outset, that our learned friend, like a skilful pleader in the very statement of his case, introduces an ambiguity which serves him well.

Medicine is a wide word, and has a very different signification from cure. For any system to assume to be the sole instrument of effecting the recovery of the sick, would be

very presumptuous no doubt, but for a system to be the only one of directly *curing* disease, is by no means so extravagant as it might first appear, because our most distinguished and impartial opponents do not claim for any system, and only for a very few individual drugs, the power of exerting so direct and immediate an influence over disease, as to warrant our applying to them this term.

Medication is a very different affair. Sir John Forbes, after excepting the small class of diseases specifically curable, writes as follows:* "It is to the consideration of the indications and modes of treatment adapted to this, *the great body of human diseases*, that we must now address ourselves.

"In this class of diseases, the treatment is exclusively of that indirect and vicarious kind, which seeks to influence the morbid processes through the medium of changes produced in parts of the system, or in the functions of organs not necessarily or immediately connected with the diseased state, or even with its organic seat. Its immediate results are precisely the same as those which similar agencies produce in a healthy body, and if they influence disease beneficially, they can only do so by subserving, in some way or other, the provisions inherent in the system for their natural decline. Such kind of treatment, therefore, whatever be its form, can be but rarely called *curative*, in the strict meaning of that term. As, however, we have seen that this is the only kind of treatment admissible in the great body of diseases, it must be regarded as the main feature and characteristic distinction of the medical art, the real value of which, must, accordingly, be measured chiefly by the results obtainable through this department of therapeutics."

From this quotation, it appears that medical treatment in general, makes no pretension to cure in a strict sense, and therefore homœopathy, which is rightly defined by Dr. Gairdner, as a professed system of cure, and of nothing else, can in no way whatever clash with ordinary medicine in a logical point of view, however much it may do so practically. The two systems propose to themselves entirely different ends, the one proclaims that it will do its utmost to sustain

* Nature and Art, p. 229.

the frame through its throes with disease, and in this way enable it to come out victorious; the other, that it will actively assist, by knocking disease on the head. The one is an ally which supplies the means of holding out, provisions, ammunition, &c., the other an ally which falls upon the foe, and drives him from the protected country. In what sense are these two incompatible? Only in this, that if the assistance given by the former be of a kind to paralyse the efforts of the latter, it would be better for the sick man to decline such services, for it is manifestly safer to have a friend who fights your battle, than the most indefatigable and adroit of bottle-holders at your elbow.

But let us consider the exceptional cases which Sir John Forbes speaks of as being susceptible of direct and real cure. There are but *eleven* examples given by the writer, of specific cure, and they are as follows. 1. Ague, by Cinchona and Arsenic. 2. Syphilis, by Mercury. 3. Scorbutus, by Lemon juice. 4. Bronchocele, by Iodine. 5. Chlorotic anæmia, by Iron. 6. Syphilitic, gouty or strumous swellings, by Iodide of potassium. 7. Gout, by Colchicum. 8. Iritis, hepatitis, pericarditis, and other inflammations of serous membranes, by Mercury. 9. Hemicrania and intermittent neuralgia, by Iron, Arsenic, Quinine, &c. 10. Chorea, by Iron, Zinc, and Arsenic. 11. Delirium tremens, by Opium. "Here the medical art performs almost all that can be desired, certainly all that can be reasonably expected of it." Precisely so said Hahnemann, more than sixty years ago, and to this limited class he confines his observations, merely suggesting, that as nothing happens in this world by chance, so it is not by chance that Cinchona cures ague, Mercury syphilis, &c., but in virtue of some constant relationship between the action of these drugs and those diseases, that, in as much as this relationship was constant, there must be some reason for the constancy, which reason was to be sought evidently in the relation between the symptoms pro-duced by the drug, that is, its power of acting upon the v, and its power of cure—that this relation between the

two, must be either that the symptoms of the drug were like those of the disease—or contrary, or neither one or other. That the first might be called homœopathy, the second, antipathy, and the third, allopathy.

Encountering medicine, as clearly exhibited by Sir John Forbes, consisting of two wholly different branches, the one the curative, the other the sustaining, it does not strike us as at all wonderful, that Hahnemann's researches should have led him in the direction of homœopathy. But Hahnemann had not the advantage of this brave old sceptic. Let us suppose, for the sake of argument, that Hahnemann was right in affirming that, as in virtue of the similarity of the symptoms produced by specifics to the diseases they cured, they possessed this great power, so if we could increase the number of drugs whose effects we know to hold a similar relationship to diseases, we should then be able "to perform all that medical art can be reasonably expected to do;" let us suppose this to have grown into an acknowledged principle, and out of this, to have sprung a system of medicine which dealt in nothing but specifics so obtained, in what sense could we then apply the words universal and exclusive to this system?

It is a fact, admitted by both parties, that there really exist certain medicines which cure,—cure directly, specifically, certain forms of disease. We have then a perfect right to say, that in this class the administration of the remedy and the relief from the malady for which it is given, stand to one another in the relation of cause and effect. If this be true of one specific, it must be equally true of a thousand, or a million, in other words, it must be universally true, if true at all. Causation is never capricious, and once admit that a specific causes a cure because it is a specific, it requires no great exertion of logic to perceive that whenever we discover a specific, it will cure its disease. The proposition, then, of the universality of the law of the cure of diseases by their specific remedies, is little else than a truism: the idea of cure being involved in the term specific. We may as well stand aghast at the [illegible] a specific

is, all over the world, a specific, as that the law of specifics, as so defined, is a universal truth. If true at all, it must be all true, or, universally true.

Does it follow because a specific universally cures its disease, it therefore *always* does it. At first sight, the two propositions seem interchangeable, but there is all the difference in the world between them: the first applies to the general nature of specifics, the last to their particular application. Let us hear what Sir John Forbes says on this point, p. 247. "I think no candid physician of long experience, will be disposed to concede more than this,—namely, that though he has occasionally succeeded in relieving, or even *curing* several of these diseases by the means mentioned, he has also very frequently failed to do so, and even in the instances universally allowed to be most amenable to the specific treatment. In a majority of the instances adduced, the remedies have occasionally been found useful, but have more frequently failed to display anything like a special or specific power to cure their respective diseases." It is admitted, then, that although these specifics have an inherent power to cure their appropriate diseases, yet, that this power is not always manifested. What is the reason? No one will maintain that there is any important difference in the drug. Mercury and arsenic, of the purest quality, are to be obtained of every druggist. If arsenic cures ague at one time, in virtue of its specific power, and not at another, it is not owing to any change in the arsenic. The very arsenic which fails to cure, has still within it the curative property, if it be an attribute of arsenic at all. Why, then, does it fail? Because they exert the power only (to continue our quotation) "in particular states of the system, in particular stages of the disease, or after the employment of other treatment of a more general and indirect kind calculated to place the body, generally, or some parts of it, in a more normal or healthy condition than they were previously, and thus remove the obstacles to the exercise of the restorative powers, naturally inherent in the system itself."

In what does our system of giving specifics differ from the specific treatment of the old school? In this—we act by plan, they without one; we maintain, not only that these specifics cure, but add that they do so in virtue of their known relation to the forms of the disease which they cure, that knowing this relationship, we can apply them with much greater certainty, so that we have fewer failures in their action; but to require that we should have no failures, if the law of the curative relationship be true, is to impose upon fallible man an infallible accuracy. Are not the laws of projectiles a branch of mathematics, and as such, are they not both certain and universal? Does not the cannon ball describe its parabolic curve, in rigid obedience to these ascertained laws, and does it not *on paper*, never deviate from its prescribed course? Need we pursue our illustration? The target is not always hit, although the laws of projectiles are universal, nor are our curable cases always cured, although the law of specifics, as represented by the dogma *similia similibus curantur*, is in the same sense certain and universal.

At the same time, let it be understood, that the term universal is not one we should have chosen, and that we have distinctly protested against its use. In the *Introduction to the Study of Homœopathy*, published some twelve years ago, the following passage occurs: "We readily admit that universality can be predicated of the homœopathic law, only in a loose and popular sense; and that in proper philosophical language, we are not entitled to term it otherwise than a general therapeutical law. The character of universality, logically speaking, can never belong to an experimental truth, how extensive so ever it be. Homœopathy in this respect, fares neither better nor worse than other inductive science; and we would urge upon our homœopathic brethren, the propriety of never employing any other denomination but that of general curative law, namely, of a law never contradicted by experience, so far as experience goes. This is the substance of the whole of the question: for all practical purposes, no more need be demanded of, nor

need be vindicated for homœopathy. Let homœopathy gain *this* point, and it will have little cause to lament the loss of this or that logical qualification." (p. 15.)

In short, the whole of this matter may be summed up in the expression of Sydenham. "There is a wide difference betwixt medicines that *specifically answer to the indications of* treatment, and medicines that *specifically cure diseases.*" For example, Ipecacuanha is in all times, circumstances, places, and persons, in short universally, the best remedy for those varieties of ague, hæmorrhage, cough, or sickness, for which it is specific, *i. e.* homœopathic; and it is so to the *exclusion* of all other remedies not so completely specific, or homœopathic. But that does not hinder us from using it, or any other emetic, in its primary or specific power of producing vomiting to fulfil an indication, such as to expel from the stomach a poison or undigested meal. With this, we dismiss the argument of universality and exclusiveness, and follow the author in his next step.

After a few pages of the usual declamation against the arrogance, pugnacity, and dogmatism of Hahnemann's style, he proposes to examine the evidence on which rests the claim of homœopathy to the high position asserted for it. This he divides into "two parts: first, the homœopathic law in the abstract, or as inferred from selected instances: secondly, the homœopathic practice, as bearing on the truth of the alleged universal law on which it is founded." Before proceeding to his detailed objections to the truth of the homœopathic law, he explains, in detail, and pretty fairly, Hahnemann's views as to the ultimate nature of disease proceeding from changes in the immaterial vital principle—changes that are not cognizable by our senses, but only made known by their effects, viz: the symptoms they produce: while the ultimate action of medicines must also be similarly removed from our ken, except in so far as we see it in their mptoms, &c., &c.; all of which our readers are perfectly l acquainted with.

Gairdner divides his objections into three. The first consists of critical remarks and arguments against

Hahnemann's views as to the part played by the above named immaterial vital principle in health and disease. In our view it is not of the slightest practical importance whether one holds the opinion that Hahnemann held in common with all the world in his day, or the opinions more prevalent now; the proof being that we hold the latter in common with Dr. Gairdner. Therefore we may safely pass over without farther comment this first objection and proceed at once to the *second.*

It is here that in reality lies the whole strength of his case. This constitutes the pith and marrow of this and all similar merely argumentative essays against homœopathy, *i. e.*, all essays which belie their name, and are chiefly occupied by endeavours to find reasons for escaping the trouble of the only real way of meeting the question, viz., a careful and laborious refutation of the experiments on which the doctrine really rests. Hitherto all the arguments have been somewhat of a metaphysical and abstract character, which have in reality little influence over the minds of practical men, and fail to convince them that, granting the truth of the homœopathic law, a complete system of practice cannot be founded on it surpassing in simplicity and perfection all others hitherto known. But once find out that this principle of cure with specific dynamic medicine is only *nearly* co-equal with disease, *but not quite,* then this constitutes a difficulty which, if well worked and pressed home, may break up homœopathy entirely as a system of medicine, and reduce the principle of similia similibus from its present and overwhelming predominance to the rank of a quite subordinate and somewhat curious variety in the actions of drugs, and where Dr. Gairdner, (as indeed was Dr. Christison before him), is quite willing to admit it in spite of all the foregoing metaphysical arguments on its absurdity. At p. 108 he commences his second objection by arguing that Hahnemann's principle breaks down when applied to many diseases. Thus Hahnemann says himself, "Mechanical diseases requiring surgical appliances are excepted from its operation. But why? Is not a stone in the bladder a most palpable disease, and is it

not removed by a most palpable remedy? Do we not touch here by means of the knife and forceps the proximate or essential cause of the disease? *quæ presens facit morbum, sublata tollit.* And when we have this palpable cause in view, do we not take it out and cure the patient, and leave the mysterious vital force, with all its occult operations, to shift for itself? Now, suppose the obstruction to be of a different kind—a tape-worm in the intestines, an acarus in the skin, a gall-stone in the biliary passage, an undue fermentation of the food, an indigestible mass in the stomach, a poison in the blood. Of most of these sources of disease considered as essential causes of certain symptoms we have incontrovertible proof; some of the causes we can remove by medicine, thereby removing the disease, some of them we cannot so remove. But with most physicians the same principles apply to all, *i.e.*, removal of the cause if that be possible—palliation of the symptoms if not. Hahnemann, on the contrary, divides these precisely similar cases into two or perhaps into three classes. Where the cause (*causa occasionalis*) can be directly removed, he will not shut his eyes to the necessity of this proceeding; but where it cannot, or where the nature of the cause is only a shade less palpable than a stone in the bladder, *i. e.*, where the disease is internal and without an evident *causa occasionalis*, he will refuse to seek it further, and will take refuge in the mist of an immaterial essence only to be reached by specific remedies. Palliative remedies, and empirical attempts at cure, he equally repudiates." . . . "Yet who shall say that we are wrong, if we assert in opposition to Hahnemann, that the great mass of the ills that flesh is heir to occupy precisely this middle position which Hahnemann will not admit? Their cause is to a certain extent removed from observation, and perhaps still farther removed from the action of remedies; or it is complex, and is only in part within our reach; but it is still a material cause as cognizable in theory, possibly as amenable to practice (if we only knew what it was), as the stone, or the acarus, or the tape-worm."

Now, we cannot deny that this is a strong point against us

and well put, and quite sufficient to render untenable the position that dynamic specific remedies chosen homœopathically contain all the resources for good that the whole art of medicine possesses, if anybody ever held that position, which, however, Hahnemann does not, and therefore, theoretically, he escapes the force of Dr. Gairdner's argument. Practically, however, Hahnemann strains every nerve to reduce those exceptional instances to the lowest possible point, and he leaves you with the impression that, except in the instance of asphyxia and one or two more, the true physician should never require the aid of the more palpable primary action of drugs.

On the other hand, observe how skilfully Dr. Gairdner conducts us from acari—a cause plainly external—to undigested and fermenting food—a cause nominally within the body, but external to organic influence; and then again to gall-stones—now dead irritants, though produced by vital action, till he slips into "poison in the blood," and from that to the supposition that "the great mass of the ills that flesh is heir to occupy precisely that middle position which Hahnemann will not admit," and are, therefore, not amenable to the influence of dynamic specific treatment, but require the ordinary palliative and allopathic uses of drugs. Where the two antagonists thus agree as to the extreme points, but come to such opposite conclusions by mere shifting of the proportion of the intermediate matter, it is of course impossible to argue on any general grounds; and the truth can only be arrived at by following out each instance in its minutest detail, and unravelling the complexity of relations that can give colour to such opposite conclusions. If we do so fairly, we think the conclusion will be made plain that though we cannot restrict the use of drugs in their primary action to such very narrow limits as Hahnemann implies, still in the vast majority of instances alluded to by Dr. Gairdner the dynamic and homœopathic action is still applicable and the best.

To begin with the instance of undigested and fermenting food: there is no doubt when the presence of such an exciting cause is distinctly to be recognised, we must admit the pro-

priety of removing it by an emetic or any other such means, and we would not hesitate to do so. But, as every practitioner of experience must know, such cases constitute a very small part of those he is called on to treat, for by the time he arrives, nature or some domestic remedy has been beforehand with him in that respect, and what remains for him to do is to combat the purely vital disorders of function and structure that may have been produced. This can only be done by the alterative powers of medicine, and here of course the homœopathic principle may come into play, and is, therefore, applicable to nearly all the part the physician is called on to perform in their affection. Again, though during the pain caused by the actual passage of a gall-stone we cannot expect relief from a homœopathic medicine any more than that the latter could prevent us from feeling the pain of a pinch of the skin; yet taking the treatment of a patient with gall-stone as a whole, the preponderance of the period amenable to homœopathic treatment is very great. For the derangement of the quality of the bile which produces such concretions must of course proceed from a dynamic derangement of the vital function of the liver, only to be reached by the dynamic influence of drugs of some kind or other, thus leaving the field open for the homœopathic law if correct.

Practically, again, when we consider the fact of the difficulty of diagnosis and the number of cases of acute pains, &c., erroneously attributed to gall-stones, but dependent on spasm or neuralgia, and therefore amenable to dynamic specific treatment, the number of cases in which we have to use chloroform or other narcotics to mitigate the pains attributed to gall-stones becomes very small indeed. We have frequently seen cases of recurring attacks of pains that had been attributed to gall-stones, entirely removed very shortly after commencing homœopathic treatment.

It is needless to go over each instance in full detail,—we may pass on to the entozoa, which being the most complicated will lead us to a full consideration of the position of homœopathy in many incurable organic diseases.

As the question of these parasites is still involved in some

obscurity, and a source of some difficulty to practical men, we may enter into it a little in detail. It is triumphantly asked, since it is now known that all that array of symptoms is found to depend on a foreign organism introduced from without, what is the use of attempting to treat those symptoms or indeed how can they be treated at all in any other way than by simply expelling the intruders by the readiest means at hand? And, also, how is it possible to talk of producing similar symptoms when you cannot produce the proximate cause unless we give at the same time a death blow to homœopathy by admitting as similar a mere verbal similarity to a mere unconnected set of symptoms whose fundamental or proximate cause has no resemblance to the one in question? What a contrast, it is said, is not this to the old rational system of medicine in which we seek by all means solely to ascertain the *cause* of the disease, and thus simply remove that at once by the proper rational means, and then the disease itself vanishes at once.

Now that within the last few years the great mystery that enveloped the origin of the entozoa has been cleared up by the researches of Steenstrup, Kölliker, Owen, Küchenmeister, and others, and the doctrine of alternation of generation has been found to afford the clue to the hitherto insurmountable difficulties of the question, it becomes a matter pertaining almost more to the province of the naturalist than that of the physician. The tendency of the naturalist is to the conclusion that as the generation of these depends on ova or embryoes introduced from without, which are traced from their origin first as ova in the tænia say of man, which are expelled, then eaten by other animals, say swine, in them developed into the intermediate stage of existence, as cysticerci; these latter, if again swallowed by a human being, are again developed into mature tæniæ, and complete the cycle of generation of the animal. This last has been verified by an actual experiment performed by Küchenmeister, on a condemned criminal, to whom cysticerci of the pig were given, and after death were found in the intestine as tæniæ of corresponding size. From these facts the ten-

dency of naturalists is to the conclusion that the organism is perfectly passive as regards the reception of entozoa, and that no diathesis or disease is required to explain their presence in a particular person, or has anything to do with the symptoms when there, and that the difference of liability of individuals and almost exceptional degrees of the presence of it in some, must be explained by considerations based on the diffusion of germs that belong to the province of the naturalist alone. Therefore, that practically the physician can do nothing but, as a preventive, to caution people against eating half-cooked, or raw meat, especially pork, game, and fish, so as to escape the ingestion of living germs, and when once he has got them he must drive it out as quickly as possible with anthelmintics. So far as these views may be correct, the question has no bearing on homœopathy, because both schools must be on a par, for as far as prevention goes they are of course alike, and so far as cure goes they must both be alike, *i. e.*, alike empirical, because no one will pretend that he can give any "rational" explanation of the action of male fern, kousso, pomegranate, or any one of the somewhat numerous "specifics;" all that is known is simply the fact that they do act as stated, and they are accepted as purely empirical remedies by men of sense of all schools. Here we must freely confess that the homœopathic law fails to throw any light on the matter, and we cannot say that, as in other cases, it represents the law of "specifics," as it does in the dynamic action of medicine, for we cannot maintain that any of those drugs produce the corresponding parasite in a healthy body without the introduction of the germ from without, any more than we could produce a crop of wheat without sowing the corresponding seed. Our opponents are welcome to make the most of this admission, which simply amounts to this, that in the prevention of entozoa by the help of the hints afforded by natural history, we are as "rational" as they are, and in using the common means for expelling them we are as "empirical" as they are. So far for the pure naturalist's view of the case. On the other hand, physicians of all schools while they do not deny the foregoing, feel that it does not practically meet the whole facts of the case. They find that

in a number of persons equally exposed, some are much more liable to suffer than others from these parasites. Also in those affected with parasites, the symptoms are at times much more troublesome than at others, which differences do not depend on the parasites, but on changes in the body of the patient. Practically they have come to the conclusion that "anthelmintics" are seldom indicated, in fact, are likely to do more harm than good, and that if we can restore the health by other means, alterative or what not, the worms get into a quiescent state and produce no trouble. Here, of course, the homœopathic dynamic treatment can come into play, and this margin represents the great majority of the instances requiring medical treatment. The fact that we can and do relieve all the symptoms ascribed to worms, without removing their alleged cause, conducts us to a principle of wider application, which justifies the appropriateness of the homœopathic dynamic treatment in the great mass of cases from which Dr. Gairdner would shut it out.

For example, the presence of a decayed stump in the gums, may undoubtedly be set down as "the cause" of toothache in Dr. Gairdner's sense. Nevertheless it may have been there for months or years and produced no toothache, till an accidental cold, or indigestion, or some other *concurrent* cause, puts the system into such a state, that the tooth becomes now a cause of irritation. Is there not a margin then here, in which medicine can avail, even without removing the tooth? Undoubtedly, and not only sometimes, but in the majority of cases, we can, and do, cure the toothache without extracting the tooth, by dynamic and homœopathic medicines, and not by surgery, or narcotics, or other palliatives, as Dr. Gairdner would have it. The *concurrent* cause being removed by the appropriate specific, the offending body returns to its quiescent state. Much the same may be said of the presence of a foreign body—say a bullet—which often gives no trouble for years, and now and then is roused up by the advent of some concurrent cause, and again becomes quiescent when that is pacified. But we can go further than that, and take the instance of some of those internal material causes, the consequence of previous vital derangement, but now organic and

incurable, such as valvular disease of the heart. Here, no doubt, Dr. Gairdner is disposed to chuckle, and exclaim, "well, surely, you cannot talk of homœopathic treatment here, your Nux, and Mercurius, and Pulsatilla, &c., have not the power of producing valvular disease, and even if they had, the time for their use is long gone by, so your treatment cannot possibly be homœopathic, you must fall back on the old established primary action of drugs for mere palliation." But he is mistaken, for though those medicines are not homœopathic to thickened valves, and no medicine could possibly restore them, yet there is a wide margin for benefit, from strictly homœopathic treatment. For, however difficult it may be to explain, we know that the painful and troublesome symptoms are far from being uniformly present in the same degree, and are, at times, reduced to an almost quiescent state, till roused up by the presence of some concurrent cause within or without the body, such as plethora, gastric disorder, or hepatic congestion, catarrhs, mental emotions, or changes in the nervous or muscular tissue of the heart. An appropriate homœopathic purely dynamic treatment, often gives surprising relief, and reduces the organic disease to its quiescent state again. Of course, here, it requires the help of an enlightened pathology to guide us to the true *simile* in such a case, and prevent us being misled by the predominance of the heart symptoms, which are not in reality the chief objects of treatment. And to show Dr. Gairdner how a physician, who "scoffs at pathology,"* is likely to be successful, we recommend to his perusal Dr. Henderson's cases on this point, in the last No. of this Journal.

A similar analytic consideration would easily demonstrate the large margin that remains for dynamic homœopathic treatment in many other structural and incurable derangements of the lungs and the liver, and other important organs.

* This is Dr. Gairdner's expression, with the full consciousness all the time that the opponent against whom he directs his chief batteries is the present occupant of the Chair of Pathology in the University of Edinburgh! Great efforts have been made by the tool of the drug-vending practitioners in England, viz., "The Lancet," to displace Professor Henderson on account of his homœopathic heresy. Perhaps Dr. Gairdner might not object to "sit in the scorner's chair!"

It is, however, granted that a period does come, when those remedies fail any longer to give any relief, and the primary disease has got to such a height as to impede the cardinal functions of the body, and bring death very near. It is possible that, in some instances, a certain amount of relief might be given, for a short time, by allopathic means such as the use of diuretics in hydrothorax, which may relieve the dyspnœa, and prolong life a little while. When such is the case, we are not to be debarred from giving every chance of relief to the patient by their use, though we cannot hope for a cure. But the time for their use is very limited, in comparison with that of the homœopathic medicines, for no antipathic palliative should ever be tried, till all the known homœopathic dynamic medicines applicable have lost their effect. The reason being obvious, viz: that as long as the latter have any effect at all, it is a pure and unmixed good, whereas, the little relief procured by the former, is purchased at the expense of a reaction, only staved off by constantly augmented doses.

To return to the entozoa—a period likewise may come, that from their number, or size, or other reasons, their presence becomes the predominant cause of disease, and the concurrent causes are not present, or are relatively insignificant. In this case, we would not scruple to get rid of them in the same empirical manner as the old school. Here, however, another complication occurs, which throws the balance of rationality in our favour, for some of the anthelmintics have no known relation to the human organism, and seem to act by killing the worm, while others, when given in the healthy body, produce derangements similar to those produced by worms, and are therefore homœopathic in all they do to relieve the symptoms, short of killing the parasite.

We think, therefore, we have shown, that in the very class of cases fixed on by Dr. Gairdner, as furthest removed from their influence, the homœopathic dynamic medicines have such a large margin of applicability, that all other remedies are reduced to mere exceptional cases.

With respect to his attempt to reduce derangements of the blood within that category, we entirely refuse to entertain

such a notion, as the composition of a fluid changing so rapidly, is completely under vital dynamic influences, and as such, within the sphere of dynamic specific medicine. Singularly enough, one of the diseases in which a peculiar state of the blood is best ascertained, viz: gout, is one in which the power of a dynamic specific remedy is admitted by all.

We pass now to the consideration of our author's third objection.

"*Thirdly*, admitting that Hahnemann's theory of disease and cure, in general, were as sound as I have shown it to be unsound, the special application of it is a *petitio principii*, or unproved assumption of the most gross and indefensible kind. It amounts to this, that as the author of nature has established, for our guidance, a relation between the symptoms of natural diseases and the artificial symptoms excited by remedies, it is our duty to discover their relation; but as the two classes of symptoms (according to Hahnemann) must be either *similar, dissimilar, or contrary*, our choice of remedies must also be either *homœopathic, allopathic, or antipathic*. Both of the latter, however, have been tried, and found wanting; therefore the former is necessarily, exclusively, and universally true.

"Such is the argument. To every step of it I object. Not to press for the present the consideration that this argument is, at best, a leap in the dark from allopathy and antipathy, presumed on insufficient grounds to be false, into homœopathy, presumed on equally insufficient grounds to be true. I protest against the endeavour to exhaust the possible relation of symptoms to each other, in the above three formulas. The experienced and scientific physician well knows, that relations of the most unquestionable and definite kind, have been discovered between symptoms* which are not to

* "For example. Blindness is a symptom or a form of disease. Of course one case of blindness may be said to be similar to another case of blindness; and in the ordinary homœopathic sense, it can scarcely be said to be similar to anything else. It is not very similar to a case of deafness, or loss of smell, or of taste, or of touch, or of motion. Yet with all these, it may present pathological relations of the closest and most intimate kind. Given several cases of blindness. The patients are all deprived, or partially deprived of the

be expressed in the idea of mere likeness or unlikeness; just as the mathematician knows that there exist among numbers, relations of the most complex and exact kind, which are not to be expressed in the old and crude Pythagorean formulæ, of equal and unequal, male and female, generated and not generated. These relations are, in both cases, the object of legitimate science. But the science of *pathological* relations is repudiated by the homœopathist, who shuts himself up in the prison of his own crude conceptions, and puzzles himself in the vague search after mere analogy, the most lax and fluctuating of all foundations for scientific knowledge. The law of homœopathy could only be proved in theory, according to Hahnemann, by disproving every other possible relation between the symptoms of the remedy and the symptoms of the disease. But so far from doing this, he has not disproved, any more than he has hitherto proved, any thing at all. He has assumed much, he has guessed at more, and he ends with making the assertion, that homœopathy must be true, because allopathy and antipathy are false. And this is what we are told to consider a logical exposition of the homœopathic law, independently of experiment?"

With submission, we do think that the formulæ, homœopathic, antipathic, and allopathic, which mean simply similar, opposite, and *something else*, do exhaust all the possible relations between the symptoms produced by medicine and those of natural diseases. But Dr. Gairdner knows perfectly well that it was not by syllogistic reasoning with one element so vague as the "something else" that Hahnemann pretended to establish the homœopathic law. It was solely by reiterated experiments, which, demonstrated by a constant

light of day; the forms and colours of objects, the gay mantle of nature, the varied works of art, are shut out from the conception of all; they are "similar" cases. But one patient may be blind from cataract, one from palsy of the retina, one from inflammation of the cornea, one from adhesion of the pupil, one from tumour of the brain, one from total destruction of the eyeball. How much more really unlike each other are these "similar" cases than many others which to the common view, present no such similarity at all? Again. How much more resemblance between a case of blindness and lameness, both dependent on diseased brain, than between the former and a case of blindness from cataract?"

occurrence of the fact, that wherever a dynamic specific healing power was shown by a medicine, it happened that that medicine possessed the power of producing a similar morbid state in the healthy body. This constant succession of facts justified their generalization into a therapeutic law, and not till then when expounding it systematically, does he make use of the above division into three categories. Feeling, then, that the main point in this argument has no weight, our author endeavours to raise a cloud of dust by making difficulties about the practical meaning of the term "similar." Accordingly the pith of his argument lies in the above note about blindness. When we first read this note we felt quite "taken aback," in the same way as one feels if a scolding woman takes the first word, and with supreme disregard of reason and consistency, accuses you of the very thing that constitutes the gravamen of her offence. If there is one thing we, as homœopathic practitioners, are bored with more than another, it is the necessity for daily reiteration of explanations, to silly and superficial people, of the difference between a real pathological similarity and one that is only in name. Nevertheless we expect, to the end of our practice, to be constantly asked by the uneducated for a remedy for blindness without distinction, and to be asked why, as we cured one, we could not also cure his neighbour, who was also afflicted with blindness, while we had obtained a specific for "blindness" in every medicine that could produce "blindness." For this we are prepared, and express no surprise. But we must confess the greatest surprise to see such a shallow and superficial argument in the mouth of a magnate of the Edinburgh School of Pathology! Indeed, we can only attribute it to the presence of another variety of blindness, not included in his list, and which hindered him from seeing what he has himself written in another part of this same paper. He there argues, that even supposing in many instances a similarity between the disease and the remedy had been pointed out, that would not establish the homœopathic principle; because, amid the complex pheno-

mena of diseases and the action of remedies, there must happen, now and then, accidental resemblance.

"As there is for example, between the action of an emetic and the sickness caused by the surfeit, for which the emetic is plainly the proper remedy. To establish the homœopathic principle as regards this particular symptom, it would be necessary to prove, that in *all* cases of stomach sickness the cure is to be sought in the artificial use of substances tending to stomach sickness, or something like it; and that the more sick the stomach, the more is the homœopathic remedy in question indicated. The fact, however, is, that the evidence of the homœopathic theory stands before us in 'shreds and patches' only; we are never invited to take up any single class of symptoms, much less any single symptom, and to exhaust the consideration of it in relation to its appropriate remedy or remedies; on the contrary, we are asked to view symptoms in their most intricate combinations, and to seek for traces of similarity between the *totality* of the symptoms ascribed to the disease and the *totality* of the symptoms ascribed to the remedy."

Now if blindness is a symptom depending on a variety of dissimilar morbid conditions, most assuredly the same and more may be said of sickness. Among a few of the different conditions of that symptom we may mention: disordered stomach; disgust; distension, softening, scirrhus, ulceration of the stomach; inflammation, stricture, or degeneration of the intestines; acrid poisoning; nervous, bilious, typhoid, or eruptive fevers; inflammation of the peritoneum, liver, spleen, uterus, kidneys, or bladder; retention of urine; amenorrhœa; inflammation, degeneration, concussion, or injuries of the brain; hyd[illegible]; pregnancy; sea-sickness; bru[illegible] the [illegible], hysteria; metastasis, &c. [illegible]

In spite o[illegible]
do not troubl[illegible]
confuse me w[illegible]
bruised testicle[illegible]
and every medicin[illegible]

becomes of your specific law? With his own note about blindness before us does he require any farther answer? We think not: out of his own mouth he is condemned; and with this we take leave of his third and last objection to the homœopathic law in the abstract.

After having demolished, with what success the reader may judge, the homœopathic law in the abstract, our author next proceeds to attack the experimental evidence on which it is really founded.

His way of doing this is to follow Dr. Simpson's lead on the same subject, and, indeed, copy his jokes on the topic. This way, as may be remembered, is simply to work up the difficulties of the question in such a plausible way as to destroy the value of the evidence in the eyes of those who are willing to give a superficial consideration only to the matter. He selects three instances of specifics, which he puts forward as the representatives of the class, and thinks if he can invalidate their claim to producing similar disease in the healthy body that he need say no more, and the question is settled. These are Cinchona, Belladonna, and Vaccination. At the outset we must decline to allow the question of prophylaxis, which bears particularly on the two last, to be mixed up with the present, and, therefore, we shall confine ourselves to Cinchona. The homœopathicity of this drug to ague is denied by Dr. Gairdner, on the ground that "the utmost that is asserted with any show of probability in the case of Quinine is that when taken in any considerable quantity in (by) a healthy person, it is apt to induce *feverishness* and *headache*, with *furred tongue* and *nausea*." Therefore, we have not the shadow of ground to deduce its homœopathic action in such a well-marked disease as ague, for if it really produced anything like ague the resemblance could not fail to be recognised in a moment.

In the first place, we renounce the attempt to prove the [illegible]ciple by reference to the few homœopathic common use among the adherents of the [illegible]rh they may know pretty well the [illegible] medicines in disease, yet their

knowledge of their action on the healthy body is of the scantiest and vaguest description. Therefore, we claim that the only detailed and accurate records of the physiological actions of medicines, viz., the homœopathic Materia Medica, must be recognised, otherwise the strength of our opponents' case is in proportion to their ignorance, and, therefore, must be very great indeed! Likewise, it must be remembered there are reasons, to be given presently, why the resemblance of the physiological and therapeutic action of specifics is not so broad and glaring as to force itself on the attention of the careless and indifferent observer, but must be sought out with great patience and trouble; therefore, we must appeal to records of the minute character possessed by our Materia Medica alone. Nevertheless, it does happen that in the great mass of experiments that have been made on Quinine, the fact of the resemblance has come out so strongly as to force itself on the notice of ordinary observers, as we see in the following, in opposition to Dr. Gairdner:—

Dr. Weitenweber, of Prague, an allopathist, writes thus in the *Œsterreichische Wochenschrift*, for March, 1844, and cites as his supporters Dr. Lachmann and Professors Schroff and Stark:—"It is well known that experience and observation had long before the time of Hahnemann established the fact that many medicinal substances had the power of creating those very diseases against which they afforded the best remedies. To this class indisputably belongs the Peruvian Bark, when given at improper times or in improper quanties, since the so-called Cinchona disease (China-Siechthum) offers a strong analogy with intermittents." Again, Dr. Götz (*Med. Zeit. Russl.*, 1851,) denies that Quinine can radically cure ague, because he found that after taking a considerable quantity of it, he became affected with a sort of intermittent fever. And Dr. Chevallier, who has the medical supervision of a large Quinine manufactory, says (*Ann. d. Hyg., Juil.* 1852,) that the workmen are subject to a fever closely resembling ag[illegible] but only by removal from th[illegible]

Thus, thou[illegible]

yet we accept it gladly as corroborative evidence. As such it is remarkably telling in our favour, while it is absolutely destructive to any pretext of rationality in the use of such medicine at all by the old school. For on what possible principle can they give Quinine in agues, or mercury in iritis, &c., when they know that in any per centage, however small, those medicines will produce the very disease in question, and on their own principles, therefore, grievously, if not fatally, aggravate it when already there? Though thus wholly unable to render any rational account of their own practice with those specifics, there remain two difficulties which hinder their adoption of our principle in explanation. These are, *first*, why is it so seldom that we see anything like the disease developed in the healthy when taking the drug? Medical men are accustomed to give Quinine in tolerable doses daily to numbers of people, and they are not continually summoned to treat artificial agues; and, *second*, when a resemblance does appear, why is it so faint and indistinct as to be difficult to recognize without great care and trouble? These difficulties we do not hesitate to admit to their full extent, but we do not fear to grapple with them. In the first place, these difficulties only apply to those diseases which are of a peculiar and specific character: the more common derangements of function and ordinary inflammatory states of the mucous membranes are simulated easily enough, and closely enough, to be recognized by all, such as sickness; purging; pains in stomach; headache, &c., by the action of Ipecacuanha, Veratrum, Aconite, Nux vomica, &c. But as to the more specific diseases, such as ague, they are more difficult to produce by medicines, still the difficulty is, we assert, *not greater than in just proportion to the action of their natural exciting causes.* Thus, for example, in a town with 50,000 inhabitants exposed to the action of malaria, we shall probably find at some given time not more than 50 affected with ague. What does this mean? Simply, that of 1000 persons to whom the marsh poison was ad-

ministered, only one had the ***susceptibility to its action so developed*** that he took the disease. Now we maintain that with respect to Quinine within a much smaller number than that we should meet with cases where the peculiar action would be sufficiently developed to show its homœopathic relation to the diseases that it cures. Still this shows the great difficulty of discovering the peculiar and specific properties of a medicine, and that it may require to be given long and perseveringly to scores, or even hundreds, of individuals before we can meet with one in whom the specific susceptibility is sufficiently developed to show the specific action properly. With respect to the ***second difficulty***, it is never pretended that the homœopathic medicine in general produces on the healthy body phenomena of the intensity and coherence that would give rise to disease so like the real one as to be mistaken by any body for it: for the great majority of cases of disease are too complicated, and consist of several phases, or different pathological states, for which different medicines in succession are the appropriate ***similia.*** And even in the more specific diseases, which consist of an isolated group of well defined symptoms, such as ague, the physiological action of the medicine must differ so much in *intensity* that the resemblance may not be at all striking. To corroborate and explain this we think we cannot do better than call in a witness whom we are charmed always to present to Dr. Gairdner, as he has such implicit confidence in him, and has such a very high opinion of him in every way, viz., himself. At p. 114, Dr. Gairdner says vaccination has a pathological identity or similarity with small pox, *i.e.*, a relation founded on [illegible] common cause, but the [illegible] And a little further on he [illegible] I think most practical physici[illegible] are diseases havin[illegible] symptoms, to small-[illegible] are apt to be mista[illegible] never is), even after [illegible]

which are not in any degree protective, and which may be followed by true small-pox (if the patient be exposed to the infection) within a very few days."

The difference, I presume all will allow, is chiefly in degree; the pustule of vaccinia is very similar, and there is a slight fever. There is only one pustule, and a corresponding degree of fever, and, doubtless, if there were more pustules in vaccination there would be more fever, and it is quite possible that in that case the only remaining bar to complete resemblance would disappear, viz., the fixed nature of the contagion; and it would also become communicable through the air like small-pox. But be this as it may, here are two diseases so "widely different" in their appearances that one could not possibly be mistaken for the other, and yet they have, nevertheless, "a pathological identity, or similarity." Perhaps our opponent may now say that this weakens our own case as much as his, for how are we ever to apply the homœopathic principle to practice at all? No doubt it interposes formidable obstacles to our doing so, but those obstacles though formidable are not insuperable, and a little experience of these in detail would be no bad lesson to those who talk so glibly of homœopathy being a royal road to medical practice which dispenses with all thought, trouble, and previous acquaintance with the medical sciences. A little reflection shows us that the error of Dr. Gairdner in the above argument lies wholly in attributing to a "wide difference" of external aspect of the two diseases what was merely the result of partial and incomplete observation of the phenomena. For it is not sufficient merely to look at the patient and ask a few questions to his sensations, or the state of the common functions; affords few indications in a disease of such a low degree ity as the vaccinia. We must do more than that, follow the observation of the subject perhaps for not only the individual but many, and thus re of a very peculiar character at apparently trifling ailment, ted against the small-pox,

—already a pretty sufficient proof of pathological similarity. But it may be even necessary to do more, and experiment for years by inoculating cows with small-pox, and again trying that upon human beings, before we fully establish the pathological similarity. But all this belongs to the "totality of the symptoms," which expression is of the widest description, and includes all phenomena which give information characteristic of a disease. Therefore, we cannot allow the existence of a "wide difference" between two diseases from the comparison of imperfectly developed and partially observed symptoms. And conversely we can assert the pathological similarity of two morbid states, such us Quinine disease and ague, although in many instances the symptoms that most obviously strike our senses may be so little marked as to yield the evidence of pathological similarity to the patient and careful observer alone.

But we go farther, and not only can we prove from the homœopathic Materia Medica that Cinchona is the pathological *simile* (we thank Dr. Gairdner for suggesting that expression) of ague, but we can narrow its sphere to a particular variety for which alone it is homœopathic and specific, thus affording an explanation of the well-known fact that Quinine will not cure all cases of ague—a fact that stultifies the common theories of medicine just as remarkably as the other fact that Quinine can cure any case of ague. Our Materia Medica also properly [illegible] pathological *similia* of other [illegible], Nux vomica, Veratrum [illegible] to cure with those [illegible]

Having thus [illegible] ague, it will [illegible] specifics th[illegible] further than [illegible] to them; for [illegible] Ipecacuanha, [illegible] &c., all of which [illegible] killing the patient [illegible] have the power of [illegible]

The remarks of our author on the dose are of such a common-place character that we need not take any notice of them.

Of the Psora theory and Hahnemann's speculations regarding the nature of disease, all we need say is that they were in accordance rather with the doctrines which prevailed half-a-century ago, when he wrote, than with those of the present day, but however erroneous they may appear, it is a consolatory fact that they have not prevented eminent pathologists like Professors Arnold of Heidelberg, and Henderson of Edinburgh, from investigating and accepting the system of homœopathy; nay, even Andral so far admitted the claims of this method of treatment to be worthy of experimental verification, that he instituted a series of trials in the hospital under his direction, and although from his extreme ignorance of the appropriate remedies, and the scantiness of time and attention he devoted to the work, his results are valueless, yet the acknowledgment by so great a pathologist that there was nothing in the hypothetical views of Hahnemann to deter an earnest physician from inquiring into the practical efficiency of his system of treatment, is answer enough to the squeamish objectors of lesser magnitude, who are so wonderfully shocked at what they look upon as erroneous notions as to be quite unable to give a serious and candid examination to the great facts on which the merits of this method of medicine are maintained by its practitioners to rest.

But what shall we say of the horror of our Edinburgh philosopher at the impiety of Hahnemann? "There must be a sure and trustworthy method of treatment as certainly as God is the wisest and best of beings, for it would be indifference to the tortures of His best beloved creatures have denied to the genius of man the discovery of positive certain remedies, with their easy, sure, and trustworthy tion to the cure of disease." "I confess," writes agree of reluctance in quoting even these fanatical, and as it seems to upon the divine government

of the world." It would seem that to Dr. Gairdner it was a reflection upon the wisdom of the Creator to assume that He had prearranged the means for the restoration of the health of his creatures. We can quite understand the repugnance to this, to us invigorating conception, entertained by the adherents of the school of nature. If it be true that, as they say, disease is a natural process, with its natural and well established laws, and if we are to obey the laws of nature, and to adopt for our motto, "LET ILL ALONE," then indeed to affirm that disease instead of being inherent in man is introduced by sin, and that as we believe in a remedy for moral evil so we also are entitled to hope for antidotes against bodily ailments, is a presumptuous defiance of nature. But for our parts we should prefer in this matter being wrong with Hahnemann than right with Dr. Gairdner. We should be loth to believe in the strongest testimony that the eye was extinguished in the socket of the universe, and that instead of being under laws designed to work out our spiritual and physical perfection we were to be for ever subject to the laws of nature, the laws of sin, disease, and death. If Hahnemann has erred in imputing to our Creator a purpose of goodness even in regard to our restoration from disease by the discoveries he permits genius, his chosen instrument, to make of the laws by which we may be led to the selection of the appropriate remedy for every curable malady, he has erred in the company of almost all the wise and good men who have ever lived, and if it is so impious in him to scale the heavens and bring God down as interested in the welfare of men, and as exhibiting his wisdom and kindness by furnishing means for the alleviation of their sufferings, if such notions are to be reckoned blasphemous when expressed by Hahnemann, pray what can Dr. Gairdner think of Paley, Chalmers, and the Bridgewater essayists? Are we to be forbidden applying to the art of medicine the argument of design? Nay then let us agree to worship chance, and not torment ourselves with trying to solve problems with which we have nothing to do. Let us eat and drink, and take our chance, and let our

patients take theirs. This is the philosophy of some of the modern Athenians, and it certainly has a strong resemblance to the doctrines of Epicurus.

With these remarks we complete our review of the theoretical part of Dr. Gairdner's essay. The remainder is taken up with an attempt to establish the singular position that though homœopathic medicines have not, and cannot have, any possible effect, and if they had any, from the erroneous principle on which they are chosen, that effect must necessarily be a bad one; nevertheless, it is quite possible that homœopathic physicians may be successful practitioners of medicine. This of course he tries to do by ingeniously working the figures of hospital statistics, and explaining away the utility of all medicines, and other suppositions, which we need not enter into, as before completing this we received the commentary of Professor Henderson on the subject, that immediately follows this review. We, therefore, willingly resign the field to our esteemed friend, and here conclude our remarks upon Dr. Gairdner's Edinburgh essay, and though we have charged him with being an unscrupulous partizan of the old school, and not doing justice to the subject on which he professed to write, as a public teacher, and not as a disputant, yet we cordially acknowledge that in the general style of his language and demeanour, as well as the literary ability he has displayed, his essay forms a delightful contrast to the usual tirades we encounter against homœopathy, and we trust that now that we have once emerged from the vulgar uproar of personal strife into the higher region of calm discussion nothing will ever again induce either party to descend into the lower region, from which we started some fifteen years ago.

Note by Professor Henderson *on Dr. W. T. Gairdner's Essay on Homœopathy.*

Having had no expectation of acquiring any additional light on homœopathic medicine, or of being gratified by an intelligent and candid criticism of the subject, from the pen

of one who had on a previous occasion written, as I had been informed, with much acrimony against it, I did not look into Dr. W. T. Gairdner's Essay until I had been asked repeatedly for an explanation of several portions of it in which opinions and statements of mine were adverted to or discussed. On perusing those portions of the Essay, I came with no small reluctance to the conclusion that, considering the favourable circumstances in which the Essay had been published, they should not be allowed to pass without an exposure of the errors which they either expressly assert, or allowed to be easily extracted from them. The reluctance I have mentioned arose from my disinclination to enter the field of controversy again for even so moderate an effort as this fresh occasion seemed to require, while I felt at the same time that, if the error in question were to be exposed at all, the exposure ought to proceed from myself, and indeed could hardly be expected from any one else. I would not, however, have it to be inferred from the length of this preface, or from my writing this communication at all, that I attach much importance to the mis-statements on which I am about to comment. Homœopathy has got far beyond the reach of material injury from mis-statements of any quality or extent, and readers of controversial works by its opponents, which profess to explain or refute it, have learnt that there are two sides to the question, and that if much can be said on the one, at least as much can be said on the other. My present purpose is to supply a little of this latter description to those who have leisure and curiosity enough to desire it.

It appears that, in one of my publications,* when engaged with the argument of Dr. Simpson that homœopathy is opposed to "common sense," after shewing the absurdity of that assertion, I took occasion to add, "But common sense is quite competent to decide which of two systems of treatment is the best—that which has the greatest number of recoveries or that which has not." To this opinion Dr. Gairdner takes exception and remarks, "That if there be anything which

* Reply to Dr. Simpson's pamphlet, &c. 1852.

requires the exercise of a skilful judgment, and a specially educated critical faculty, it is precisely a question of this nature—one involving considerations of the most delicate and, moreover, of the most technical kind that it is possible to conceive. To refer the question between the two systems of treatment, therefore, to 'common sense' on the faith of *ex parte* statistics, implies a degree of insensibility to the true conditions of the inquiry, which only the blinding influence of party could possibly have produced in a mind naturally so acute and so critical as that of Dr. Henderson," (p. 122).

On this passage, the first remark which I have to make is that, in appealing to "common sense" as the arbiter in the only question which I proposed to refer to it, I neither affirmed nor implied that that "specially" uneducated faculty was to collect the materials, or to dispose of the delicate and technical considerations, necessary in constructing a statistical exposition of the kind adverted to. My meaning was obviously this,—that the statistics having been prepared by the "skilful judgment" of professional men, "common sense" of such a quality as is found among men of ordinary mental culture is competent to decide,—having heard both parties with reasonable attention, and having gathered from both some knowledge of the character which fair statistics should possess,—which has the greater weight of statistical evidence in its favour, and which method, therefore, is the safest and best. Such is my opinion still; and I venture to say that, in my work entitled "Homœopathy fairly Represented," statistics as full and fair, as conclusive and intelligible to men of common education, as exist on any points in practical medicine, or in any other subject, are to be found,—the technical accuracy of which has never been questioned, and which are so far from being *ex parte* that the most striking testimony to the superiority of the homœopathic results is actually furnished by the facts presented by an allopathic authority! I allude here to Dr. Dietl of Vienna, to whose researches on the mortality of inflammation of the lungs,—the very disease in which the results of the homœopathic treatment have been

the most keenly disputed,—not only is the world indebted for evidences of the destructive powers of ordinary allopathic practice, (bloodletting, and tartar emetic), but we of the other school owe the vindication of our statistics of that and of other acute diseases from the calumnious misrepresentations of our opponents. I refer those who are not already acquainted with the important observations of the allopathic physician I have named, to the abstract which is given of them in the work of mine adverted to above, while I confine myself here to the briefest summary of his results, and of the argument deducible from them. Among 191 cases of inflammation of the lungs treated by blood-letting or by tartar emetic, 39 were fatal, being at the rate of more than 20 per cent.; while among 189 cases of the same disease, left entirely to nature, 14 only were fatal, being at the rate of little more than 7 per cent., or about one-third of the mortality which happened under the allopathic treatment. Now on the supposition, so eagerly proclaimed by our opponents, that the homœopathic treatment is no treatment at all, but a mere leaving of disease to follow its own course, it is perfectly certain that it must, in inflammation of the lungs, be attended by at most only one-third of the mortality which falls to the lot of the allopathic treatment. This is no *ex parte* statement,—not a word of it could be omitted by any allopathic writer who would give a truthful account of the particulars to which it relates. No doubt we hold and give statistical evidence in support of our assertion, that homœopathic treatment presents a superiority of success over the allopathic still greater than the expectant method of Dietl exhibits, but if these statistics be objected to on the ground that they are *ex parte*, and if the exact measure of the greater success we allege be disallowed; notwithstanding, if our treatment be not *positively* injurious, which no one affirms it to be, it can by no artifice or ingenuity be deprived of the distinction, such as it is, of being very much more successful in its results than the allopathic treatment is. On this point, and to this extent, I appeal confidently to the "common sense" of men of common understanding, and of common education.

Originally the dispute between homœopathic and allopathic physicians did not descend to the details of the alleged success of either party, but, in so far as the latter of the disputants was concerned, consisted of contemptuous sneers at the supposition that homœopathy could ever cope with any serious inflammation, whatever it might be imagined to perform in chronic ailments, with the assistance of faith and a carefully regulated diet. Homœopathic statistics of inflammation of the lungs, and of other acute diseases, were generally discredited—regarded as impossible, and that very naturally, it must be allowed, by men who believe that abundant blood-letting and large quantities of tartar emetic were necessary for their cure. But it by no means followed that men of "common sense," not hoodwinked by professional prejudices, could not arrive at a juster conclusion on the subject, when asked to consider the following data, submitted by me to their judgment, in the pamphlet* to which Dr. Gairdner alludes.

"Dr. Fleischmann, of the Homœopathic Hospital of Vienna, at various periods has published the results of his treatment of inflammation of the lungs, between the years 1834 and 1848, the latter being the last period for which his statistics have reached me. Dr. Reiss, of the Homœopathic Hospital at Lintz, Dr. Schweitzer, of the Homœopathic Hospital of Kremsier, and Dr. Tessier, of the Hospital of "Sainte-Marguerite," of Paris, also have published the statistics of their Homœopathic treatment of the same disease, and the collective results are as follows:—728 cases of inflammation of the lungs, 35 deaths, or one death in 21 cases; less than five per cent. In my letter to Dr. Forbes, I have given an account of the comparative success in the same disease, of the best hospital physicians, who use allopathic remedies, in Paris; they furnish 531 cases, of which 81 died or one in six and two-thirds, or about fifteen per cent. In the "Introduction to the study of Homœopathy," various allopathic authorities are referred to as furnishing 909 cases of this disease, with

* Reply to Dr. Simpson's Pamphlet, &c., 1852.

212 deaths, or 23·32 per cent.; nearly one death in every four cases." Common sense knows very well that accidental dissimilarities are liable to occur between small groups of cases that are contrasted, and that, on that account the comparison of such may point to an erroneous conclusion. While, on the other hand, that useful endowment knows equally well that numbers so large as those I have given in the above passage by their very magnitude exclude accidental sources of fallacy, and lead to a conclusion sound and trustworthy. That I was not wrong in appealing to men of common sense to arbitrate in the matter at issue, from the statistics submitted to them, to the extent of determining which system had the greater number of recoveries, and was, therefore, the best, is conclusively determined by the researches of Dietl to which I have referred above, and which prove incontestibly that, as I have already said, unless homœopathy be an actively injurious system, it must be much more successful in inflammation of the lungs than allopathy, for allopathy is *three times as fatal as no treatment at all is.* Dr. Gairdner has had the boldness to ignore altogether the facts which have been furnished by Dietl, although he is an allopathic physician; and while quite aware that those facts place the superiority of the homœopathic over the allopathic treatment of inflammation of the lungs (whatever it may be owing to) beyond all question or cavil, expends the little courage he manifests on the subject of statistics chiefly in an attempt to invalidate those of only one of the various homœopathic authorities to whom I have alluded above—Dr. Fleischmann. And this he does on the ground—not that he has accidentally understated the mortality of his patients, not that his cases of inflammation of the lungs were peculiarly favourable to recovery, not even on the plea, so often urged, that the salubrious situation and the quiet of his hospital, gave a peculiar advantage to his patients, but on the very simple ground—that he *lied,* which is the plain English of the following sentence:—" Every example of curable disease which could, however violently, be twisted into the semblance of pneumonia or pleurisy, was

made to swell the list of these two formidable diseases, and thus to increase the apparent success of the homœopathic experiment."* Falsehood was not, I confess, one of the vices which I conceived likely to exist as an objection to any of the statistics I submitted to the judgment of common sense, and when I saw it so plainly laid to the charge of a physician whom I had been accustomed to regard with respect, and of whom Sir John Forbes had written in the following terms:—"He is a regular, well-educated physician, as capable of forming a true diagnosis as other practitioners, and he is considered by those who know him as a man of honour and respectability, and incapable of attesting a falsehood;"† I felt some curiosity to know the nature and extent of the proofs by which so grave a charge was justified, for I could not believe that any honourable opponent, a lover of truth himself, could advance it without evidence of the clearest and strongest kind—although the person against whom it was made was so far off as Vienna. My surprise was great at finding the whole evidence comprised in the following passage:—"As regards the cases of acute disease supposed to have been treated with such surprising success in the homœopathic hospitals, one fact may suffice to indicate the bias in the numerical statements. All the world over, catarrh of the chest, or bronchitis, is a very frequent disease, while pneumonia, as well as pleurisy, are comparatively rare. Vienna is no exception to this rule; for in the general hospitals of that city, there are admitted 2,078 cases of catarrh for 509 of pneumonia, and 427 of pleurisy. In the homœopathic hospitals, on the con-

* That I have not put too strong a construction on this language appears from the following words applied elsewhere by the same writer to the same statistics:—"They are a sham and a fraud."—*Medical Times*, 1852. The somewhat less coarse and unmannerly style adopted in the Essay may have been chosen in deference to the respectable company in which it appears; or, better still, the author may have repented of his former excesses and have resolved to aim at the language and demeanour of a well-bred man. On the latter supposition, I shall say nothing of his former publication that might tend to disturb his good resolution.

† Brit. & For. Med. Rev. No. 41.

trary, the proportion is so completely inverted, that for 300 cases of pneumonia and 224 of pleurisy there are only 15 of acute bronchitis mentioned, while all the other diseases of the chest together do not make up nearly the difference: thus showing clearly that every example of curable disease which could, however violently," &c. (p. 125). I suppose the author of this paragraph thought it very cunningly devised, and had no fears that his ingenuity could by possibility be detected and exposed. It requires but a few words to undeceive him. The reader will observe that he is expected to believe "catarrh" and "acute bronchitis" are synonymous terms—mean the same disease; while in point of fact "catarrh" means merely a disease in which there is cough and expectoration, though it may have lasted half a century, and "acute bronchitis" means an inflammation of the bronchial tubes of a recent date, and attended by inflammatory fever. When, therefore the 2,078 cases of *catarrh* from the allopathic hospitals are advanced to prove that many, a great many, of the cases of *acute bronchitis* which must have occurred (besides the 15, according to the argument) in the homœopathic hospital had been "twisted" so as to appear under the more formidable name of pneumonia, a most unfair and uncandid statement is made. I have not access at present to the statistics of the allopathic hospitals of Vienna, and I cannot say how many of the 2,078 cases of catarrh were cases of acute bronchitis, but I venture, and on very good grounds, to assert that the proportion of the latter disease among the 2,078 was not large, and that the great majority of the 2,078 was composed of chronic, many of them no doubt inveterate, bronchial disease. For acute bronchitis is in Vienna a much rarer disease than inflammation of the lungs, and Vienna *is* an exception to the frequency of bronchitis all the world over. In proof of which statement I adduce the following testimony of one who attended with assiduity, as it appears, the hospitals of Vienna, and is, moreover, an eager adversary of homœopathy. "This (bronchitis) is," says he, "a comparatively rare disease in

Vienna, and *compared with the frequency of pneumonia it is most strikingly so.*"* I have put into italics the clause which flatly contradicts the assertion of Dr. Gairdner as to the relative frequency of the two diseases in Vienna, and which, therefore, renders his imputation of a dishonest "twisting" of cases of bronchitis into the semblance of of pneumonia unnecessary to account for the disproportion between the numbers of the two diseases as recorded in Dr. Fleischmann's statistics, and converts it into a gratuitous injury. If, notwithstanding what has been said of the comparative rarity of bronchitis in Vienna, 15 be regarded as an exceedingly small number compared to the cases of pneumonia, it may be observed that, owing to the want of precision but too common in medical nomenclature everywhere, it is highly probable that a good many cases of acute bronchitis have been included among influenzas and catarrhal fevers, of which 227 are recorded in the table.

In further proof of the correctness of Dr. Fleischmann's account of the number of his cases of pneumonia, I bring forward the testimony of the last witness—as unexceptionable when saying anything that can redound to the advantage of homœopathy, as he is much the reverse when assailing it with his very harmless abuse. He attended Dr. Fleischmann's hospital regularly during May, June, and July, of 1846, and saw 320 patients, of whom 19 laboured under inflammation of the lungs. 17 of these cases are described in detail, and two are briefly noticed. Now, by simple proportion, we learn that if 320 give 19, 6557 (the whole number of patients admitted into the hospital in eight years) should yield, as nearly as possible, 390! so that the real difficulty in the matter, which has been so singularly misrepresented, is to ascertain why Dr. Fleischmann had only 300 cases instead of 390. And what makes the disproportion all the more unaccountable is, that the 19 cases of inflammation of the lungs in the 320 patients occurred at the very season when

* Letter to Dr. Forbes, in Brit. & For. Med. Rev., 1847, by G. W. Balfour, M.D.

pneumonia in Vienna, if it be like other cities, is the least abundant! Perhaps the exculpatory evidence I have now adduced did not occur to Dr. Gairdner; perhaps he had forgotten all about Dr. Balfour's letters; and, perhaps, if he had recollected them, he would have been too just to a professional brother, although he is a homœopathist, to have accused him of a crime which every man, with a spark of honourable feeling, regards as among the worst that can be laid to his charge. If I am right in my conjecture, in supposing that Dr. Gairdner is incapable of a gross violation of truth and justice, he will lose no time in defending his imputation *by evidence*; or else handsomely, as becometh a gentleman, when apprised that he has unwittingly done the grossest injustice which one man can do to another, make an ample apology to the man he has traduced.

The vindication of the homœopathic statistics of pneumonia, both as to the absolute number of the cases, and as to the superiority of the results of the treatment over those of the allopathic practice, carries along with it a vindication of the same particulars of the statistics of pleurisy, peritonitis, and the other acute inflammations. For at the time when those homœopathic statistics were published, pneumonia was not known, as it has since been by the researches of Dietl and others, to be capable of being treated so much more successfully by a merely expectant or negative method than by the allopathic means; a superiority which, in so far as the mere mortality is concerned, approaches so nearly that of the homœopathic treatment itself. And it is not to be imagined that inaccuracy in the statistics regarding the mortality of pneumonia, under homœopathic treatment, could have *accidentally* presented, from so many different sources, results corresponding so nearly with one another, and with those of that expectant treatment of Dietl and some other allopathic physicians, with which homœopathic treatment is said by its opponents to be essentially the same. We are plainly, therefore, entitled to the benefit of a demonstration, such as has been given of the accuracy of our statistics of p a, in vin tis other in-

flammatory diseases which were not, and to this hour are not, known by homœopathic physicians or by others to be less capable of being successfully treated by either expectant or by homœopathic treatment, than pneumonia was before the publication of Dietl's work. I need not, therefore, enter into details regarding these other inflammations, for the homœopathic statistics regarding them are objected to for no better reasons than those which have so signally failed when urged against the statistics of pneumonia.

I cannot leave this part of the subject without noticing the only attempt which the author of the Essay makes to come to close quarters with homœopathy on the question of its mortality in pneumonia. One acquainted previously with the subject would naturally expect that in an essay professing to deal candidly and manfully with a question of so much importance—for considering only the extent to which homœopathy exists throughout the world it *is* of much importance—the unchallenged records of some public hospital, such as that attached to the Hotel Dieu of Paris, where Dr. Tessier treated* his patients homœopathically, or the hospital in Vienna, where Dr. Dietl treated † so many of his on the expectant plan, should have been selected for a grave and earnest discussion of the subject. These, and such as these, are the sources from which alone materials sufficiently abundant, and entirely free from the interferences which are liable to disturb and deteriorate those which are collected in private practice can be derived; and it is on materials acquired from such sources that physicians of the homœopathic school have almost exclusively founded their public assertion of the superiority of their practice over the allopathic. But the essayist, for certain very obvious, if not very creditable, reasons of his own, has preferred selecting for his animadversions an insignificant number of cases which I have adverted to as having occurred in my private practice. His words are :—

"Dr. Henderson has taken occasion to inform us in one

* He has since been promoted to the Hôpital Beaujon.

† He has recently been appointed Professor in the University of Cracow.

place, obviously, though not statedly, for purposes of numerical comparison, that he had treated *homœopathically throughout* 16 cases of pneumonia with *one* death. To this statement, considered merely as a statement, I do not object; but if we are intended to draw the inference from it, that the homœopathic mortality of pneumonia in Dr. Henderson's hands has been 1 in 16, then I must observe that such an inference, however naturally resulting from the facts stated, would be grossly incorrect. For in a detailed record of eleven cases of pneumonia homœopathically treated, published in the *Homœopathic Journal* for 1850, Dr. Henderson incidentally notices *two* very severe and complicated cases, in one of which he himself, in the other the friends of the patient, became dissatisfied with the results of the homœopathic treatment, and both of which cases ended fatally, after passing into the hands of another physician. Such events are known to be common in the practice of most homœopathists; the alarm of a really severe disease being generally all that is required to send men away from infinitesimals in quest of active remedies. Indeed, I suppose that few instances of really severe and fatal disease are ever treated 'homœopathically throughout' in private practice, at least among those able to have a choice of physicians. But it is evidently a most erroneous calculation which would pass over these palpable failures of the homœopathic treatment, simply because they were transferred, possibly when beyond hope, into other hands. Had the two cases alluded to (and we have no security that there were not others) remained under Dr. Henderson's treatment and died (as they most probably would in any hands), the mortality of his cases would at once have been altered from 1 in 16 to 1 in 6; which, considering the character of the cases reported, would have been a very high average indeed." (p. 123.)

My first observation upon this passage is, that my allusion to the 16 cases of pneumonia in question was obviously *not* for the purposes of numerical comparison. Writing, some five or six years ago, regarding the success of the homœopathic treatment under Fleischmann and other hospital phy-

sicians, at a time when it was almost universally believed, in the allopathic world, that acute inflammations required vigorous blood-letting, &c. for their cure, I took occasion to add in a note some of my own reasons for believing that the accounts of the homœopathic success were trustworthy, those reasons having been that I had treated 16 cases of pneumonia homœopathically throughout (that is without bleedings, &c.) with only one death; 10 of croup without a death; "besides a few cases of pericarditis, pleurisy, peritonitis, and many of dysentery, &c., &c."

In the next place, I remark that the account of the "two severe and complicated cases, &c.," is not fairly given,—that particulars are suppressed, which, if stated in the essay, would have prevented those cases from appearing to its readers to warrant much of what they are employed to prove or to suggest. It is not mentioned that the "severe" case of pneumonia, as the essayist would have it appear, placed by the friends in other hands, was under my care for only one day, and during that time, was a case only of *lumbago*, while it was not till the poor old lady had been *three days* without relief under the other physician, that her case turned out to be pneumonia. She died, certainly, seven days afterwards, but on no honest principle that I ever heard of, can her death be put down to a system which never treated her for the disease of which she died, and had no opportunity of doing so. All these particulars are noticed in my reference to the case, but are most successfully suppressed in the essay. The homœopathic physician may be just as fairly charged with the death of every man who happens to die ten days after he last shook hands, or took snuff, with him, as with such a "severe and complicated case" as the above. Why, it may be asked, was the case noticed by me at all, in a record of cases of pneumonia. The answer is, that two other cases occurred to me about the same time, in which *lumbago* had happened a few days before inflammation of the lungs had commenced, and that the "severe and complicated" case appeared to me worth mentioning in connexion with that part of their history. Both of these cases having had the

good fortune to have sensible friends, had also the advantage of being "treated homœopathically throughout," and the consequent happiness of being cured, although they most certainly were very much more "severe and complicated cases" than that which had the orthodox benefit of "active remedies," and incurred their too frequent penalty. From which double success, in more unfavourable circumstances as to age and complications in both, and to long previous bad health in one, I very reasonably inferred, that, but for the "friends," the third case, like the others, might have been still alive.

I have no desire to be very hard upon "friends of the patient." They no doubt act according to the best of their judgment and knowledge, and when patients happen to have friends with a scanty provision of either, that is their misfortune, and there can be no help for it. But I do think it very paltry conduct in a physician to chuckle over the preference which his sect may occasionally receive from persons of whose competency to judge and to decide regarding the merits of the one practice or the other he knows absolutely nothing. In exhibitions of this kind, it is not the philosopher, the man of science, the truth-seeker whom we see, but the small and commoner man,—the fee-seeker, the partisan, the every-day practitioner. Besides, the round assertion in the essay about the "alarm of a really severe disease being *generally*, &c.," is actually not true, as the very record of cases on which the commentary is made, abundantly testifies,—for of the whole thirteen patients noticed in that paper, only one was withdrawn by "friends," and at a time when her illness was the least severe and alarming of the whole number. And why? Her husband was an old valetudinary allopathic doctor, who, in conformity with the instinct of that kind of being, went, naturally enough, in "quest of active remedies," and he got them,—(having had "a choice of physicians,") and that, too, very long before the patient was "beyond hope,"—that is to say, if the "quest" did not of itself, as Dietl's statistics induce me to believe it did, place her in that unhappy predicament. To

end this dissension about friends and their doings, I must say, since a subject so utterly worthless has been introduced in a way intended to tell against homœopathy, that I have reason to believe, or rather to know, that the custom among "friends" and patients, is the very reverse of what is stated in the essay,—a large proportion of homœopathic practice, consisting of acute and chronic cases, in which allopathy had failed,—a circumstance which I confess never appeared to me to be any reason for exultation, but when I knew it to result from superior intelligence in those who made the change.

Of the other severe and complicated case, in regard to which it is said that I myself became dissatisfied with the homœopathic treatment,—the fact is, that treatment *was not tried*, and is not said in my account of the case to have been so. Neither Dr. Alison nor I could make out what the case really was, (as is fully stated by me in the paper referred to,) and in such company, I may be pardoned for expressing my conviction that, if we could not make it out, few others were likely to do so. And yet the fatal termination of a case which was never understood during life, and was not treated as a case of pneumonia, on either homœopathic or allopathic principles, is complacently numbered, though in a hypothetical sort of way, among homœopathic results! I leave this subject, with the remark that those two cases, thus easily divested of every shadow of a claim to a place in the statistics of the homœopathic treatment of pneumonia, supply the only objections which Dr. Gairdner has made to the elaborate details on pneumonia, given in my "Homœopathy fairly represented," although they are not statedly advanced as objections to those details, probably because, had they been so, it would not have been easy to evade the consideration of the much more important and wholly unobjectionable hospital statistics of the disease, with which my small contribution is mixed up.

In reference to the general statistical returns of hospitals, as distinguished from those of particular diseases, Dr. Gairdner makes the following statement:—"Dr. Henderson

himself, (while defending, as it were, every inch of defensible ground) now admits the unfairness of the original comparison, instituted by the homœopathists, on this point." The "now" in this sentence, is calculated to mislead, for it implies that at one time I had considered a comparison between the general results of homœopathic and of allopathic hospital statistics as allowable and fair, whereas, I never entertained any such opinion, and never said or implied that I did. My knowledge of hospitals had taught me that the quality of the diseases they contained varied greatly, according to their situation,—that those in the heart of large cities contained many diseases, and these often of the worse description, which could not be expected to occur, in the same proportion, in suburban or rural institutions of the same kind,—and I knew that Fleischmann's hospital was on the outskirts of Vienna. I have never, therefore, adverted to general hospital returns, and their comparative mortality, and have always thought it unfortunate that any homœopathic physicians should have done so, for the purpose of showing the superiority of homœopathic practice.

The author of the essay refers his readers to a paper of his, in the *Medical Times*, for a fuller account of his views regarding the general returns of homœopathic and allopathic hospitals, than he gives in his new production, and appears to glory in the imagination that that extraordinary article has remained unanswered,—because unanswerable. With some curiosity, therefore, I turned to that hitherto unnoticed but notable piece, in order to learn what were the deep and original reasonings which had lain for so many years undistinguished by the trump of fame. I was somewhat surprized to find that the gist of the article consisted of nothing else than the very obvious objections to which I have adverted above, as the reasons which have always deterred me from attaching any value to a comparison of the general statistical results of hospitals pertaining to the rival medical schools; and that special objection to Dr. Fleischmann's numerical account of his cases of pneumonia, the accuracy of ch, I have already shewn to be not only credible, but

indisputable. I do not say that I was surprised to find, besides, a very discreditable misapplication of extracts from my own writings, and such very disgraceful terms applied to the publication of Dr. Fleischmann, as "mendacious documents," "statistical fraud," and similar insolent vulgarities. My appeal to "common sense," which was restricted to the special statistics of pneumonia, and of the other acute inflammations, regarded separately, and contrasted with those of the *same* diseases as furnished by allopathic hospitals, is deliberately, and, to use the language of the article in the *Medical Times*, "with amazing effrontery" employed in such a way as to make it appear to have been designed to extend to the general statistics indiscriminately. And my concluding remarks on Dr. Fleischmann's success in the treatment of erysipelas, pericarditis, and dysentery, that it was "far beyond the reach of any other known method of treatment," is with the same deliberation and truthfulness, made to appear as if applied to his general hospital results. This is all very bad, but it is as nothing compared to the treatment which has been reserved for Dr. Fleischmann. The grossest fraud for the worst of purposes is, without apparent scruple or hesitation,—nay, with obvious eagerness and delight,—again and again charged against him; and one almost shudders at the satisfaction with which the writer gloats upon the picture of infamy which he has drawn. Let the reader who may suspect my account of the article to be too highly coloured peruse it, and judge for himself; the author has not yet lived long enough to be ashamed of it; in his latest publication, he recommends it for perusal.

And what act, or acts, of baseness has Dr. Fleischmann committed to warrant such unmeasured abuse? He has published a tabulated statement of the number and nature of the diseases admitted during eight years into the hospital over which he presides, and they it appears differ so much from those which have been admitted into larger and more public hospitals, that the general mortality of his small hospital presents a smaller, and the cures a larger, per centage on the admissions than are to be found in the statistics of

the great public hospitals — the very results which were inseparable from the character of the diseases with which he dealt! He makes no concealment of the generally more curable quality of the diseases which he had to treat, compared with that of the diseases received into the large and central public hospitals—to which, as vast medical poor-houses, the great bulk of the poverty-stricken incurables of crowded cities, naturally resort, if not with the hope of cure, or of even relief from medicines, at least with the hope of being provided against the rigors of winter, and the miseries of want, or of ending their days in some measure of comfort. Such advantages the accommodation of a private hospital, with only 50 beds, could supply but to a very few, even if they were sought for there, otherwise the benefit of remedial treatment must have been refused to the many applicants who were still within the reach of its operation. At all events, Dr. Fleischmann declares publicly the nature of the diseases he had admitted into his hospital, so that every one who takes an interest in medical affairs may learn for himself what kind of diseases they were which he treated successfully, and in what diseases he failed; and may compare his results of whatever kind with the results obtained in other hospitals in the same maladies. Dr. Fleischmann nowhere demands a comparison between the general mortality and success of his hospital and those of others, and yet throughout the article in the *Medical Times* he is treated and accused as if the object of his tabulated publication were no other than to put allopathic hospitals to shame by a display of the vast superiority of the homœopathic over their general results. Were Dr. Fleischmann truly what he is represented in the *Medical Times* to be, he could have accomplished the purpose of which he is accused only by making the diseases he received into his hospital falsely to appear as nearly as possible the same in quality as those of the allopathic hospitals—certainly not by showing that they were so very different as to make his smaller mortality to be easily accounted for.

Alluding to t[illegible]

man can venture to deny, that I have shown that the "psora" of Hahnemann had no relation to the modern scabies or itch; but he adds, "it is inexcusable to affirm, as Dr. Henderson does, that the psoric hypothesis of Hahnemann is not, in fact, Hahnemann's." I nowhere affirm anything of the kind, but, while I point out the one or two peculiarities of the doctrine as it comes from Hahnemann, I affirm and prove that the doctrine of Hoffmann, and many other predecessors of Hahnemann, and of Willan, and many successors of Hahnemann, is, *essentially*, the same as Hahnemann's. In addition, Dr. Gairdner, as if fated never to quote my words without misapplying them, or misrepresenting what they obviously mean in their own place, makes me appear entirely to dissent from, and to condemn the psoric hypothesis when I say, in my letter to Sir John Forbes, that it is "perhaps the most unfortunate of his speculations"—a sentence which applies, as Dr. Gairdner well knew, not to the merits or demerits of the hypothesis itself—which I said then, and say now, that I regard as creditable in the main to Hahnemann and the rest, but to the name "itch-doctrine" usually applied to it by the more ignorant (and they are many) of the opponents of homœopathy.

Religion of course finds a place in every attack on homœopathy, and Hahnemann is accused in the Essay, first, of "almost" impiety, and next, of fanaticism, because in very strong, if not very choice, terms, he condemns as derogatory to the benevolence of "the Deity" (a benevolence evinced so remarkably and in so many ways towards the children of men), the notion that the practice of medicine was incapable of any greater certainty than it had acquired down to the time of which he wrote (1790); and Dr. Henderson, who considers this a pious view of the matter, makes the essay [illegible] "painful" by his approval of this attempt of the "scorn[illegible]l vehement spirit" of Hahnemann "to scale the [illegible]—to lay down laws for the Creator of the uni[illegible] [illegible]k from His grasp, under the threat, [illegible] of [illegible]ation of injustice, thinly disguised

in reverential language, the elixir of life for which the alchemists laboured in vain." (Essay, p. 106.) This flourish of bombastical absurdity has really no better foundation than Hahnemann's avowal that he could not believe that a Creator, so benevolent in everything else, had made it impossible for medicine to do more for the sufferings of mankind by disease than it had been able to do some sixty or seventy years ago. What has been accomplished since justifies, I think, Hahnemann's truthful convictions, and placing homœopathy for the moment out of view, it will hardly be denied that vaccination and etherization alone have done more to mitigate human sufferings than all that medicine had taught or done in the thousands of years that had preceded their discovery; and that they have done so, without any one having scaled the heavens for them, merely by the prosaic "efforts of the penetrating mind," with which, as Hahnemann believed, men are endowed from above, for the purpose of acquiring these and other good things. Hahnemann no doubt thought that such a blessing as homœopathy might be in store for men, if they would but use the mental powers that God had given them in a reasonable way, instead of pursuing phantoms of their own creation; and that, if they had not discovered it long before, they had to blame their own love "for constructing systems, for scholastic speculations, and transcendental abstractions," and not the "indifference" or hardness of "the Deity" on the subject of human suffering. I still think his way of looking at the subject very wise, and not a little pious; and I am also of opinion that no [illegible] in Hahnemann's early [illegible] without thankful[illegible] can I see that th[illegible] Divine governmen[illegible] ing that things coul[illegible] the long period i[illegible] thought, seventy ye[illegible] surely never intended [illegible] poor suffering humanity [illegible]

In one of my publications I happen to have said that there are "necessary limitations" to the employment of the homœopathic law, on which remark Dr. Gairdner observes, "from the moment when the homœopathic principle is regarded as subject to 'necessary limitations,' it ceases to take rank as a law of nature; for to nature's laws there can be no real, however there may be apparent exceptions," &c. The quibble here lies in making the words "exceptions" and "necessary limitations" appear to be synonymous. I believe that there are no *exceptions* to the homœopathic law within its own sphere; but it, like every other law of nature, is *limited* to its own sphere of operation. Chemical affinity operates only among the atoms of matter at insensible distances from one another; the law of gravitation operates only among ponderable substances, not on heat, light, or electricity; and so on of other laws, they each are limited to their own sphere, and within that they can have no real, however they may have apparent, exceptions. The sphere of the homœopathic law is disease of the living tissues in its yet merely or chiefly functional state, as distinguished both from advanced or completed anatomical change of structure, and from the dead products of diseased action which may yet be retained within the body. It is *limited*, therefore, in its operation to the first of these conditions of disease, and there it can have no *real* exceptions. It cannot neutralize an acid already secreted in morbid excess in the stomach—that can be done only by the chemical action of an alkali or earth, yet here there is no *exception* to the homœopathic law, whose only sphere of action in such a case is the morbid affection of the stomach which yields the acid, and which it [illegible] remedy so as to *prevent* in future a morbid excess of [illegible] being furnished by the organ. It cannot remove [illegible] which have been completed between the sur- [illegible] pleuræ as a consequence of pleurisy, but it [illegible] in action, and prevent adhesions from [illegible] to very small limits. I presume [illegible] only illustrations of what is in [illegible] As to those diseased states

of any part of the body which are beyond the sphere of homœopathy, as that has been defined above, they admit for the most part of only palliative treatment by allopathic or antipathic means, a point on which I have never entertained or expressed any other opinion; some of these diseased conditions, however, admit of being cured, as when the dead product of a morbid action has accumulated in a part of the body, and become the exciting cause of a local disease. Stone in the bladder is an instance in point; and its removal by surgical means allows the local disorder it had produced to subside and disappear. It is amusing to observe that Dr. Gairdner regards stone in the bladder "that very proximate or essential cause of disease, *quæ præsens morbum facit, sublata tollit,*" (p. 108.) thus confounding proximate with exciting cause, and making the latter the *essence* of the disease which it excites. By this confusion of terms he manages to fix upon Hahnemann (though not necessarily upon homœopathy) the error of having included diseases which are occasioned and maintained by mechanical or chemical exciting causes hidden from view within the body, among those merely functional disturbances which are the objects of specific treatment. He makes no allowance for the light which modern pathology has thrown upon such maladies, which were but little understood, sometimes not at all, in Hahnemann's time, and argues as if Hahnemann had been acquainted with their true nature and had persisted in maintaining that they were proper subjects for his specific treatment even though the exciting causes of them were not removed. Homœopathists of the present day are not blind followers of Hahnemann, and take advantage of the growing light of pathology in this and in other classes of disease, as well as their allopathic brethren do, and like them are prepared to act in accordance with the new truths which they learn.

Smith's Homœopathic Directory of the United States. Arranged by HENRY M. SMITH.—New York, 1857.

THIS little volume impresses us more than all the random assertions of friends and foes, with a feeling of amazement at the vast progress homœopathy has made among our American cousins. The bare enumeration of the names of homœopathic practitioners occupies forty-two pages, closely printed. The total number of them amounts to 1747. This number includes the practitioners in both American continents, and in the West India islands, but we need hardly say that the vast majority of the practitioners are to be found in the United States. In New York City there are 93, in Brooklyn 37, and in Philadelphia 85; in three towns 215 practitioners, exactly 15 more than we have altogether in the United Kingdom of Great Britain and Ireland. We further find from this useful little book, that there are two homœopathic colleges (Pennsylvania and Cleveland,) where students are educated and degrees conferred. There are three homœopathic hospitals (Chicago, Pennsylvania, and Massachusetts). There are twenty-four homœopathic societies, and there are pharmacies innumerable. There are only three homœopathic journals enumerated, one of which is published in Canada. A list of American homœopathic publications is given, which, however, is not very large. The literary labours of our American friends, do not seem to be in proportion to their numbers; possibly, they are so busy with practice, that they have not much time for writing.

It is curious to observe, in looking over this directory, that many of the names familiar to us as those of British homœopathists, are repeated in America. We might almost imagine we were looking at a list of our own practitioners through a multiplying glass, so frequently are our names repeated in the American directory. Thus we find two Andersons, no Ayerst, but two Ayers, one Barry—a lady doctor!—one Batty, three Bells, one Black, one Blake, no Blest, but a Bliss, which is not very different, one Booth, three Brooks, no fewer than eighteen Browns, two Chapmans, eleven Clarks, one Cochran, one Davenport, no Denham, but three Dunhams, one Dunn, no Engalls, but three [illegible] and one Ingalls, two Elliotts, three Foxes, four Grays, three [illegible] whom we may accept as the representatives of our Ozanne [illegible] Hales, one Hamilton, two Hands, eight Harrises, [illegible] Harvey, one Hastings, two Herings, one Hewitt,

one Hill, one Irvine, eight Johnsons, one Kelly, one Karr, one Laurie, one Lawrence, one MacDonald, one Massey, two Matthews, one Maine, two Metcalfs, eight Moores, three Morgans, two Nortons, one Parsons, one Patrick, five Phillips, one Quin, three Reynolds, one Reid, one Roche, one Rodgers, two Russells, two Scotts, one Simons, (very like Simmons), fifteen Smiths, two Stewarts, one Strong, two Thompsons, two Turners, one Verdi, (not very unlike Vardy), five Walkers, two Watkins, five Watsons, one Wilkinson, two Wilsons, two Woods, three Wilds, eight Wrights. On reading over this list, our readers may perhaps think that homœopathy is like one of those diseases that runs in families, and that it has attacked the transatlantic branches of those families among whom it prevails here. But a glance at the directory would shew him that the infection has spread largely among other names, among which we observe many which strike us as being characteristic American patronymics, such as Antis, Burritt, Channing, Coffin, Coe, Doe, Poe, Coon, Dodge, Cushing, Fremont, Gab, Greenleaf, Kellogg, Loomis, Rux, Ticknor, Toothaker, Zumbrock, &c. The very names of many of the towns where these doctors practise reminds us of the towns occupied by homœopathists on our side of the ocean. Here are some of them: Bath, Bristol, Chester, Manchester, Norwich, Richmond, Belfast, Yarmouth, Cambridge, Chelsea, Leicester, Northampton, Sheffield, Worcester, Canterbury, Dover, Portsmouth, Dundee, Greenwich, Liverpool, Windsor, Birmingham, Edinburgh, Newcastle, Reading, York, Wakefield, Bradford, Derby, Westminster, (New) London. But at the same time we have many other towns with names characteristically American, such as Paw Paw, Sing Sing, Paradise, Salem, and the classical names of Rome, Palmyra, Syracuse, Troy, Utica, Virgil, Memphis, besides not a few well known cities of the old world, as Pekin, Canton, Geneva, Naples, Modena, Warsaw, Hanover, Strasburg, Ghent, Lyons, &c. There is a considerable sprinkling of female M.D's in the directory. Besides the Mrs. Barry alluded to above, we find Dr. Helen C. Barker, Dr. Julia Beverly, (what a charming, romantic name, we are sure she must be pretty, so beg to blow her a kiss across the Atlantic, until we are able to send one by transatlantic submarine telegraph), Mrs. Dr. Burritt, Miss Dr. S. A. Edson, Dr. Sarah A. Entricker, Dr. Almira L. Fowler, (another charming name!), Dr. Lucy Hudson, Miss Dr. H. M. Mowry, Mr[illegible] We would like to know [illegible] husbands [illegible] their wives practise [illegible] or are

all the Mrs. Drs. widows? We would also like to know if the lady doctors take up any special branch of the profession, or if they are general practitioners? Likewise, if they have a noble contempt for their colleagues of the rougher sex, and if when a difficulty (we do not mean a duel) occurs, Miss Dr. Julia Beverly, for instance, calls in Miss Dr. H. M. Mowry in consultation,—as they reside in the same town. The existence of lady doctors being unknown on this side of the Atlantic, we are curious to know how they get on. We do not see why ladies should not enter the medical profession; and if they do well in America, surely they might do equally well here, when one of the social problems of the day is, what to do with our surplus female population? which already exceeds the male by nearly one million.

Compared with the United States, the British possessions in North America make but a paltry exhibition in the way of homœopathic practitioners; only twenty-two in all Canada. Our colonies seem to retain the conservative habits of the mother country, which contrast strongly with the go-ahead propensities of brother Jonathan, when seen in juxtaposition. Cuba seems to have the same number of homœopathic practitioners as Canada, viz: twenty-two, shewing that, homœopathically, it is ripe for annexation; while in the British West India islands there appear only four names.

General and Special Therapeutics of Mental Diseases. By Dr. G. H. G. Jahr. Translated by John M. Galloway, M.D. Manchester: Turner, 1857.

This work is an extension and amplification of the second part of the work on nervous affections and mental diseases, reviewed by us at length in Vol. XII, p. 439. The English-reading homœopathist will be beholden to Dr. Galloway for this translation of a work likely to be of considerable practical utility. Dr. Galloway's translation is, we doubt not, very faithful, but we cannot say that it is always very elegant.

OBITUARY.

Dr. Paul Wolf, of Dresden.

[illegible] the circle of his immediate friends and patients in Dresden, [illegible] of Dr. Wolf will be felt by many, who have enjoyed the [illegible] his personal acquaintance, or to whom he was known by [illegible] of the earliest champions of homœopathy.

The subject of this notice was born in Dresden on the 24th of February, 1795. He received the first elements of education at the Israelite school of Seesen, and afterwards at the school of St. Thomas in Leipzic. His first inclination was to study philosophy, but a relation persuaded him to adopt medicine as his profession. So he entered the University of Leipzic as a medical student in 1812. During the war in 1813, he came to Dresden and acted as assistant surgeon in the typhus hospital attached to the goal, where he continued until attacked by the disease. He afterwards completed his studies at Prague and thence went to Jena, where he took his degree in 1817. He passed the government examination in Dresden in the following year, not without much opposition on the part of the authorities, in consequence of his being a Hebrew. He was much complimented upon his inaugural essay on Croup, and the purity of his Latin. He settled in Dresden, but for a long time he was unable to live by his practice, but was supported by his relatives. In 1822 he married, and thereafter his practice gradually increased. In 1824, when on a visit to Prague, Professor Bischof drew his attention to homœopathy, and advised him to study it, which Wolf did under the guidance of Drs. Marenzeller and von Lichtenfels. His first experiments with the new method having been crowned with success, his confidence increased in it, and in 1826 he devoted himself entirely to its practice. He found Dr. Trinks already practising homœopathy in Dresden, and a series of persecutions soon began to be directed against these two apostles of the new system. Fines, actions at law, accusations of poisoning, the hatred of colleagues, the unbelief or mockery of the public, caricatures, in short all the armoury of oppression was employed to put them down. Without success however, for the fame of our hero went on increasing, and his practice extending. He numbered several crowned heads among his patients. He was created Hofrath of Altenburg in 1836, and a few years later was decorated with the order of Henry the Lion of Brunswick. He did not do much in the literary line, partly on account of his many professional engagements, and partly on account of his excessive dislike of publicity. One article of his however is very well known, his "Eighteen Theses," which have been more than once alluded to in this Journal. He was president of the last meeting of the German Central Homœopathic Society, in August 1856, when those who had not seen him for some time were struck by his altered and aged look. Some years previously he had suf-

fered much from an ulceration of the stomach, which had healed up, but was succeeded by fits of the gout, and two years ago he first perceived the signs of diabetes mellitus. This disease went on increasing and reduced his strength greatly. His breathing became affected and his sight impaired. Notwithstanding his sufferings he continued to pursue his practice, and refused to take proper care of his health. He knew his disease was mortal, but he had a great dread of a long illness, and so continued to work as long as possible. On the 30th December he was seized with bronchial catarrh and four days afterwards he was dead. He has left a widow and six children. His funeral shewed the general esteem in which he was held. A numerous concourse of his friends and admirers followed his body to the Jewish burial ground. The procession included the carriages of many of the most eminent inhabitants of Dresden, among others that of the Countess of Hohenau (wife of Prince Albert of Prussia), and those of the English and French ambassadors. Funeral orations were delivered at the grave by the Chief Rabbi Landau and by his friend Dr. Trinks.

Dr. Wolf's colleagues bear cordial testimony to his ability as a physician, his strict professional behaviour, and the confidence he inspired in his patients. His experience had been great, and he had profited greatly by it. He possessed a mass of information regarding the actions of medicines, such as few among us can boast of. His practical tact and almost instinctive selection of the appropriate medicine, made him a most successful practitioner. His courtesy and kindness to younger practitioners, his geniality and friendliness to his contemporaries, made him a great favourite with all his colleagues. He left behind him a sketch of a work on general therapeutics, and some fragments of practical papers.

Dr. Ludwig Hasslöcher, of Landau.

Few of us have heard the name of this homœopathic practitioner, who, however, seems to have enjoyed a great reputation in the district where he practised. He was born in Diedesfeld, near Neustadt, in 1785. His parents were poor peasants: his boyhood was spent in gathering fagots in the neighbouring wood, and picking up what instruction he could at a charity school. An old priest in the neighbourhood took notice of him with the view of bringing him up for the church. This plan, however, was not carried out, for he afterwards made the acquaintance of Dr. Hersch,

employed at the Bruchsal Hospital, who persuaded him to adopt medicine as his profession, and offered to give him the necessary instruction. This offer he eagerly embraced, and rapidly made great progress in his medical studies, especially in midwifery. The little he made at first by his profession, he sent to his poor parents, so that he had not enough to buy the books required for study. He used to sit up at night and write copies of them. He took his degree at Maintz in 1816. He commenced practice after this at his native village, where he married his first wife, who, however, died after seven years. In 1819 he received an appointment as physician accoucheur at Landau, where he married his second wife. In 1831 he was converted to homœopathy by Dr. Griesselich, and after his conversion continued to enjoy a large practice. In 1847 he gave up his practice, and went to live with his son, who was in business in Lyons. Here he remained three years. By his son's speculations he lost all his money, whereupon he returned to Landau, and commenced practice again, which he continued until laid up by his final illness. He enjoyed a great reputation as an accoucheur, and his advice and assistance were sought by patients and by physicians from far and near. He had a wonderful skill in all that related to that branch of the art of medicine he particularly cultivated. He was a man of a highly philanthropic disposition, unselfish in the extreme, a fond husband, an excellent father, and a true friend.—Hirschel's *Neue Zeitschrift*, ii, 4.)

MISCELLANEOUS.

On the Suckling and Feeding of Infants, by Dr. Kuttner.

J. fur Kinderkrankeiten. Band. 26.

Dr. Kuttner, of Dresden, presents the following aphorisms as the fruits of his practical observation:—

1. A knowledge of, and attention to, their proper nourishment is a fundamental necessity for the successful treatment of sick children. He who will cure them must, before [illegible] know how to feed them.

2. Articles of [illegible] used instead of food [illegible]

3. The mother's [illegible] when an absence [illegible]

renders suckling impossible, should the substitution of a nurse receive medical sanction.

4. In the choice of a nurse we cannot be too careful and suspicious; but the most careful examination may prove defective unless we can ascertain the condition of her own child.

5. Nurses sometimes conceal their deficiency of milk with much cunning. The continuous, spontaneous issue of milk is by no means a sign of actual abundance, but far oftener of an atonic state of the milk ducts and nipples.

6. When an infant does not thrive upon a breast, but is thirsty, constipated, and restless, the nurse, whatever the condition of the secretion of her milk may be, must be changed without hesitation.

7. Let the change be made at once, for all delay is injurious to the child; but when the mother's milk does not suffice, it should be made up, not by food, but by other milk, it being a popular error that the two milks do not agree.

8. It is not rare to find, in nurses having apparently abundance of milk, that this undergoes on their first arrival a considerable diminution. Regret at leaving their own child and home, different mode of life, and the irritation of the gland by the suckling, are the causes of this inconvenience, which ceases if we wait quietly and encourage the woman.

9. The only test of the goodness of a nurse is the condition of the child. The state of its stools testifies to the quality of the milk, and the amount of the urine to its quantity.

10. Except during the first few days, suckling every two hours is most suitable, for a too frequent, and a too seldom application to the breast are alike injurious to the condition of the milk. For the sake of a rest, a pause of five or six hours should be secured at night.

11. The appearance of the menses while suckling, if not accompanied by an abiding diminution of the milk, is not hurtful to the infant.

12. Suckling from a suppurated breast is not without danger both to the nurse and to the infant.

13. The period for ceasing suckling, or for combining feeding with it, cannot always be determined beforehand. Neither the age [illegible]d, nor the presence of a certain number of teeth can alone [illegible]s, [illegible] not less importance are the state of the health [illegible] infant, and its longing for other food, accom- [illegible]is, with a remarkable indifference to the

breast itself. The time of the year, the condition of the nurse, and especially of the secretion of milk, have also to be taken into consideration.

14. The wide spread opinion that cow's milk is more suitable in the spring, owing to the character of its food, is without foundation, as the milk is often then a purgative; while in the autumn it often undergoes an advantageous chemical change.

15. Gradual weaning, when possible, should always be preferred.

16. When suckling is impossible, cows' milk offers the best substitute.

17. The artificial feeding of children, properly managed, does not lead to such unfavourable results as usually supposed, but it is more troublesome, and often more expensive than a nurse. Children so brought up may appear, during the first six or nine months, more imperfectly nourished than sucklings; but after that period they begin to regain their size, and no difference can be detected between them.

18. It is always a great advantage for children who are to be brought up by hand if they can be suckled during the first weeks, if even only partially.

19. We cannot lay down any absolute rules for artificial feeding, which requires adaptation to individual cases; the thriving of the child, the condition of its bowels, and its quietude or restlessness must be our guides.

20. The chemical analysis of milk shows especially that this secretion is liable to great individual quantitative and qualitative varieties, dependent upon a great variety of circumstances. Hence, the remarkable differences found in the examinations of the milk made by different chemists, and the difficulty in constructing a scale of the various kinds, according to the amount of their constituent parts.

21. Every addition to cow's milk should have for its object the rendering it more similar to human milk, and consequently, more digestible.

22 and 23.—Much importance is not to be attached to always obtaining the milk from the same cow, or to the cow being fed on dry food, (hay, &c.).

24. The morning's milk is preferable, not only because it is fresher, but because it contains notably less fat and casein.

25. Warming the milk, when it cannot be given just after milking is desirable, for it otherwise gives rise to flatulence, diarrhœa, or

constipation, or at all events, to a most offensive smell of the evacuations, which at once disappears when the milk is given boiled. During the boiling a caseous membrane is formed, which protecting the milk from the access of the air, causes it to keep better.

26. Skimmed milk is not suitable to infants. Cow's milk does not contain much more fat than human, and the quantity is easily diminished by dilution. Skim milk is not only too poor in fat, but it is too old; for, having stood so long to yield its cream, it has undergone certain chemical changes. As a general rule, it is an error to forbid children fat, butter, &c., in their diet, as we thus prohibit an important article of nutrition, that appears essentially to contribute to the assimilation of albumen and its modifications. Both substances are found in the maternal milk, the fat being more abundant the shorter the time that has elapsed since delivery. Fat is also an important medicinal agent in diseases, such as scrofula and rickets, indicative of a defective nutritive process.

27. Cow's milk in general contains very little more solid constituents than human milk, and the dilution usually made is not theoretically justifiable, and at all events, this should never be carried so far that the child takes only one half milk. Cow's milk is not rendered indigestible by the absolute amount of solid constituents, but either by their chemical condition or their proportions to each other being different, neither of which conditions is influenced by dilution. Not only does too great dilution deprive the child of nutriment, but it renders the milk more indigestible, for the author's experiments have shewn the more diluted the milk the more firm does its coagulum become. He has seen many children thrive well when fed from their birth upon undiluted milk, and especially when they could drink it fresh; and if given diluted at all, not more than a fourth, or at most a third of water should be added, to be left off after some months.

28. Among all the differences between cow's and human milk, the proportion of casein is the most important, for not only is this more abundant, but it coagulates into a loose, flocculent jelly; the casein of cow's milk hardens into large firm lumps, which are with difficulty soluble, easily disturb digestion, and are often found unchanged in the stools. This alone constitutes the difficulty in nourishing infants upon cow's milk, and it also forms the best test for ascertaining the itable digestion of the milk. To remove this by coagulation, and d the infants upon the whey, would be to deprive the milk of

some of its most precious constituents. Our object must be to render the coagulum as little firm as possible. Dilution only renders it more so, while the addition of half a teaspoonful of Pulv. acaciæ to each cup of milk exerts a very good effect, the coagulum then taking in the appearance of a loose jelly. Such milk is well borne, and the undigested lumps of casein are no longer found in the better coloured stools.

29. Human milk is sweet, and the addition of sugar to cow's milk is the more required the more diluted this is used. Sugar of milk is most to be preferred, although it sweetens less. Its sweetening power is, however, increased by the addition of a minute quantity of salt.

30. Addition of salts to cow's milk is unnecessary, as these are already more abundant than in human milk. In order to prevent acidification of the milk, and especially in summer, it is desirable to add a little chalk before boiling the milk, or in the case of constipation magnesia. Cow's milk requires as little assistance from other articles of diet as does the human milk. When the development of the child is sufficiently advanced, and especially if several teeth have appeared, vegetable nutriment may be added, as biscuit, or roll, and later, gruel. These substances should be well soaked in water or weak broth, and a little salt, not sugar, added as a condiment.

31. If the sucking infant is the subject of diarrhœa, we must not all at once alter its food, but rather change the diet of the nurse, or if necessary employ another. When the employment of cow's milk with farinaceous or gummy substances cannot be borne, and an exhausting diarrhœa continues, we should substitute raw yolk of egg in a decoction of grits.—(*Extract from Med. Times and Gaz.*, Jan. 24, 1857).

Dr. Lyndsay on Glycerine.

Dr. Lindsay used glycerine himself, to the extent of two or three teaspoonfuls daily for several weeks, in order to test its nutrient properties. He found the most palatable mode of using it was when it was mixed with coff[illegible] result was a gain of weight to the extent of [illegible] discontinuing the glyce[illegible] [illegible]erine is readily miscible [illegible] [illegible] by it instead of [illegible] which it im-

parts should be objectionable to fastidious stomachs, a small quantity of sugar my be superadded. It has the characters of a syrup, and does not betray its presence by oil globules or otherwise. It may be added to tea, and it sweetens milk and cream very pleasantly, but its mixture with water is very palatable, and is the readiest and cheapest mode of administration. Dr. Lindsay carefully observed its effects as a nutrient and alterative in eight patients, to whom it was given in doses of two or three tea or tablespoonfuls daily for a month. All the patients before taking it were more or less anæmic, emaciated, and feeble; in all, the diet, exercise, and occupations were otherwise the same. At the end of the month all of them appeared greatly improved in their general condition; they seemed plumper and stronger, and in some the countenance even ruddy. In most of the cases there was a marked increase in weight at the end of the month.

By the majority of patients, to whom it was given as a nutrient, it was much relished; and its sweet taste would probably render it a favourite with children. The advantages of glycerine over cod-liver oil consist in its pleasant sweetness, and its freedom from all disagreeable odour, in its ready solubility in, or miscibility with ordinary fluids, in the absence of the principles which, in animal and vegetable oils so frequently nauseate and purge, and in its solvent and other properties which render it useful as a vehicle or basis for pharmaceutical preparations. Its great disadvantage is its present comparatively high price.

In opposition to Dr. Garrod, who has suggested that cod-liver oil acts simply in virtue of its oleine, Dr. Lindsay believes that glycerine is the active principle. Glycerine appears already to have been tried somewhat extensively in phthisis as a substitute for cod-liver oil, but the results described hitherto are contradictory. In other strumous cases, however, it appears to have proved serviceable.

Dr. Lindsay has used glycerine frequently as a dressing to wounds, ulcers, and abrasions of various kinds, with marked good results; and in these respects it seems to be equal, or even superior to collodion. In the treatment of bed-sores, he regards it as superior to gutta-percha, but inferior to the collodion. In the treatment of skin diseases it has been found useful, not only by keeping the skin constantly moist, but by allaying the irritation which so frequently companies cutaneous eruptions.—(*Edinburgh Med. Jour., Sept.*, by Dr. W. Lauder Lindsay).

Testimonial to Dr. Lyschinski.

On Thursday, 19th February, 1857, at half-past three o'clock, a meeting of about forty gentlemen, friends of Dr. Adam Lyschinski, 10 Warriston Crescent, Edinburgh, was held in Veitch's Private Hotel, 122 George Street there, for the purpose of presenting to him, on behalf of themselves and above sixty other subscribers, a testimonial consisting of an elegant Silver Tea and Coffee Service and Claret Jug. There were present, the Hon. Lord Murray; Peter Buchanan, Esq.; Theophilus Bucher, Esq.; William H. Cameron, Esq.; George Combe, Esq.; John Cox, Esq.; Robert Cox, Esq.; Alexander Cruickshank, Esq.; E. W. Dallas, Esq.; Major Douglas; Rev. Mr. Downie; Dr. Dubuc; Alexander J. Ellis, Esq.; Thomas Erskine, Esq.; Captain James Gemmell; Humphrey Graham, Esq,; Adam Graham, Esq.; James F. Gordon, Esq.; Professor Henderson; Dr. James Lawrie; William M'Candlish, Esq.; John Mackinlay, Esq.; Major Mair; William Mair, Esq. George Paterson, Esq.; Alexander Paterson, Esq.; Alexander J. Scott, Esq.; Robert Sandilands, Esq.; Robert Sinclair, Esq,; Donald M. Smith, Esq.; Dr. J. S. Sutherland; David Telfer, Esq,; Thomas Todd, Esq.; William Whitehead, Esq.

On the motion of Humphrey Graham, Esq., of Belstane, Alexander J. Scott, Esq., Principal of Owen's College, Manchester, was called to the chair.

The chairman, after briefly alluding to the purpose of the Meeting, called on Mr. Robert Cox, W.S., the Secretary and Treasurer, to report the names of the subscribers, and the sums collected.

Mr. Cox reported the amount received to be £ 76 15s. 6d. (since increased to £ 83 10s.), and read the names of the contributors.

[Here follows a list of 104 names of the highest respectability, among which we notice those of the two Princes Czartoryski, Lord Gray, Lord Murray, besides those of many clergymen and medical men.]

Letters were read from several of the subscribers, expressing regret that they were unable to attend the meeting.

The chairman then said—"Gentlemen, I will not attempt to disguise the gratification with which I find myself called to this place. It may [illegible] indeed, that [illegible] of this pleasure those who are [illegible] testify with auth[illegible]

valued friend. But by their countenance I am not discouraged, but strengthened and supported.

"Dr. Lyschinski, You have been invited to meet us that we might request your acceptance of an expression of the esteem, respect, and affection with which you are regarded by many friends, of whom not a few regret their inability to be present on this occasion. We shall naturally be asked what call there is for such an expression?—whether integrity and trustworthiness are so rare in Edinburgh as to demand that the possessor should be thus distinguished? We admit the reasonableness of such an inquiry, and acknowledge that the occasions are few of rendering such pre-eminent public services as require to be marked by a manifestation like this. But in your case there is a reason for such a manifestation. Your sense of duty to your country led to your expatriation. You have had to take root twice. You have had two careers to run. Confidence, it is said, is a plant of slow growth. Whether to our blame or to our praise, it is acknowledged to be peculiarly so in the people of this land towards foreigners. You, Sir, have won us. In a residence of a quarter of a century you have merited regard and confidence wherever you were known. At an early period of your stay here, you were thanked by one of your countrymen, the best entitled to speak in such a matter, 'for the best patriotism, the good character you gained for the Pole in a foreign land.' These were the words of Prince Czartoryski. From the same quarter proceeds a more recent testimony, which I shall be allowed to read:—

"'Nous avons appris avec grande satisfaction le témoignage de sympathie et d'estime offert à M. le Dr. Lyschinski. Non seulement nous lui donnons notre approbation, mais nous voulons nous associer à cette manifestation due sous tous les rapports à un caractère aussi parfaitement honorable.

"'16 Fevrier [1857], 'CZARTORYSKI.
"'Paris, Hotel Lambert. 'P^ce ALEXANDRE CZARTOYSKI.'

"These words require no comment from me. The place you have earned for yourself in the regards of the society of this place recalls to my recollection one who would have been among us this day, had sed Providence to spare his life, and had he not been recalled to his native country. You will not be displeased that I sociate your name with that of Agostino Ruffini. In his

case and in yours, two strangers have found a home in the esteem and attachment of the people of Edinburgh, alike honourable to this city, and to those thus welcomed. Be assured, Dr. Lyschinski, this is no mere ceremonial; no scene got up for effect. It comes from the heart. You may take it to your heart. You may impress the remembrance of it on your children, with the entire conviction that it is the genuine utterance of the goodwill and the high estimation with which you are looked upon by a numerous circle of true friends."

The plate bears the following inscription, from the pen of Mr. Nicolson:—" Presented to Adam Lyschinski, M.D., Edinburgh, by a number of his friends, in recognition of those sterling qualities, tested by the experience of years, which have won for him, in this city of his adoption, such high esteem as is due to an upright, generous, and kindly man,—a laborious, skilful, and conscientious physician.—Edinburgh, 19th February, 1857."

Dr. Lyschinski briefly expressed his warmest gratitude for the honor conferred on him; and, thanks having been voted to Major Mair and Mr. Cox for their services in promoting the purpose of the meeting, and to Mr. Scott for his able conduct in the chair, the proceedings terminated.

Continuation of Dr. Hering's American Provings.

We are gratified to find that the publication of Dr. Hering's valuable serial, entitled *Amerikanische Arzneiprüfungen*, which suddenly stopped, in 1854, with the sixth number, is speedily to be resumed. In a letter addressed, by the talented and zealous author, to the editor of Herschel's *Zeitschrift*, he explains the cause of the cessation of the work,—as usual, some difficulty with the publisher —and announces that he has made arrangements for the immediate issue of the concluding number of the first volume, which shall contain the physiological effects of *Aloes*. This will be speedily followed by a second volume, containing the following medicines. *Lachesis*, *Palladium*, *Calcarea*, *Arsenica*, *Alumen*, *Cinnabar*, *Tellurium*, *Psorinum*, *Argentum*, *Calcarea phosphorica*, *Manganella*, *Acidum fluoricum*, *Bromina*.

We are sure we express the unanimous feeling of those who

desire the advancement of homœopathy, in saying that we regard the completion of Dr. Hering's self-imposed labour of love, as one of the most important events at present looming in the future of homœopathy.

Hahnemann's Letters.

To Dr. Gerstel.

Dear Colleague,

You have given me much pleasure by your letter from Brünn. From it I can recognise in you a well instructed, a zealous, and a thinking homœopathic practitioner, and I look forward to the performance of great things in favour of our beneficent art, from the continuance of your present diligence and active exertions. If you make arrangements that no opposition should be offered to your dispensing your own medicines in Brünn, you may achieve great success there. See properly to this point. I am surprised that Mr. Fischer, the surgeon, who is well known to me, and far from an unskilful practitioner, has not remained in Brünn: was it from any hindrance of that nature? You must mind what you are about in that respect!

You have also found Phosphorus useful in the stage of collapse (Erschlaffung) of the Cholera, and half infection, (called by him Cholerine) as was first pointed out by Father Veith, in Vienna; yet he soon found reason to prefer Phosphoric acid in such cases: and I have myself observed, and obtained, experimentally in Magdeburg, the most excellent effects from Phosphoric acid, (even by frequently smelling of the drug) in those weakening diarrhœas, with much rumbling in the bowels that occur in the Cholerine, (a disease brought on by semi-infections, caused by the diluted miasm in the air, in the greater part of the inhabitants of infected towns), so that in such cases, I would give the Phos-acid the preference over Phosphorus.

Mr. Fischer's experience and testing of Carbo vegetab. in the appropriate severe cases, is very valuable.

I remain, with all good wishes,

Coethen, Your sincerely,

18th December, 1831. SAMUEL HAHNEMANN.

Hahnemann to Dr. Loewe, of Prag.

Cure of Scoliosis.

As regards the girl with the crooked spine, I would never recommend machines, which, as far as I know of them, are very far from attaining their object, but, on the contrary, do much more harm than good: and as, moreover, the disease that lies at the root of the softening of the bones, causing the curvature, is purely a psoric one, you will find it best to give, first, *Tinct. Sulph.*, one, two or three globules; then Calcarea; then Phos-acid; then Baryta, and Phosphorus, and Silicea. At the same time, the patient should walk out in the open air, and should use the gymnastic exercise of the cross-bar daily, several times, by hanging from it with both hands, and swinging to and fro several minutes at a time. You will, of course, also order that coffee, tea, and vegetable acids should be avoided. Stroking the crooked parts with mesmerising hands, has often been of use alone, and we should at least use it as an auxiliary means.

Farewell, and remember

Coethen, Yours,

23rd September, 1831. S. HAHNEMANN.

Hahnemann to Gerstel.

Dear Colleague,

I have read with great pleasure what Dr. Gross wrote to me on the report sent by you, and am surprised that the authorities have given you such good (so true) testimonials, and I beg you to make them known in several widely circulated newspapers. You cannot believe how much good is done by a well deserved vote of thanks, and how much you thereby stimulate other authorities to render similar services to the cause of homœopathy. Hitherto, the homœopathists could bring forward nothing but bitter complaints about the injustice and neglect that were shown to them. And, however pardonable such complaints and accusations might be, still they, nevertheless, made a bad impression on the public, and by no means tended to raise homœopathy in its estimation. I have, therefore, never openly made a [illegible] of the bitter and cruel enmities which we[illegible] [illegible] last five or six years of my

residence here. *For I would far rather be envied than pitied.* Yet I would also, if possible, avoid the former. It is only within the last few years, that I have been able so to win over and convince, of the superiority of our art, the public, which for years had been prejudiced and hounded on against me by allopaths, apothecaries and surgeons, that now, even this same public are so much the more angry with the doctors and apothecaries, and prefer me so much above all others, that I am quite at a loss how to take in hand all the patients: I am, as it were, carried off my feet.

So, I thought things had happened for the best, and my opinion is, you have no need to be afraid of the ill will of your colleagues in Moravia, for in your country, the frightful impediment to homœopathic practice—*i. e.*, the prohibition to dispense our own medicines—is, as you assure me, done away with. This impediment still exists in almost all other countries, and renders homœopathy almost impracticable here—except to me alone, as I have a letter of permission from the Sovereign of the land. That the doctors in Brünn, could hunt out Mr. Fischer, (who was certainly a very capable man) arose from the circumstance that he had no diploma; and in this respect, they can do nothing against you. The public in Brünn is already favourably disposed towards homœopathy, and therefore I would not counsel you against establishing yourself there. From the Prague bills of mortality, which I have consulted diligently, it appeared to be plainly shown that you cannot have had your hands free to act there, otherwise the rate of mortality would have been more favourable, and a number of patients would have been rescued from death by your aid. It would please me to receive further good news of you.

Your devoted,

Coethen, SAM. HAHNEMANN.

12th February, 1832.

P.S.—In thought, I am often in Prague; but to go there personally, is, under present circumstances, purely impossible. What the treatment of the cholera with *Camphor, given on the instant of invasion of the disease* can effect, you can see from the enclosed [illegible]rence, which I request you to send to Dr. Anton Schmidt, in [illegible] by the first opportunity.

Mr. Startin's method for the prevention of pitting in Small-pox.

[To the Editor of the Medical Times and Gazette.]

SIR,—Several communications upon the means of preventing pitting in small-pox having lately appeared in your pages, I am induced to forward you a method which has been uniformly successful in every appropriate case in which an opportunity for adopting it has been afforded me; which may amount to twelve or fourteen cases during the last few years.

The plan consists in applying the acetum cantharidis (P.L.) or any vesicating fluid,* by means of a camel-hair brush, to the apex of each spot or pustule of the disease, on all the exposed surfaces of the body, until blistering is evidenced by the whiteness of the skin in the parts subjected to the application, when the fluid producing it is to be washed off with water or thin arrowroot gruel.

The vesication for each pustule should not be larger than the eighth or sixth of an inch in diameter, leaving intact the boundary of the inflammation, excepting where the malady has become confluent, when the entire surface so affected should be vesicated.

With respect to the best period of the eruption of small-pox for making this application, although between the fourth and eighth days should be preferred, the vesication has seemed to me to have been efficacious whenever it has been practised before the slough has formed, evidenced by the secretion of pus, which slough is at once the cause of the pitting, and the peculiar characteristic of this formidable malady.

The only after treatment in these cases consists in puncturing the blisters with a needle, in keeping the affected skin clean by means of arrowroot or rice gruel, (avoiding soap of every kind,) and in bathing the eruption several times a day, by the aid of soft sponge or linen wetted with the following lotion:—℞ Sodæ biboracis, ℈j.; Ammoniæ sesquicarbonatis, ʒj.; Acidi hydrocyanici diluti, ʒj.; Glycerini destillati, ℥ss.; A[illegible] ad ℥xij. M. Ft. lotio.

The pain [illegible] vesicating fluid is very slight and [illegible] disap[illegible] simultaneously with the ablutions [illegible] much to the

* It will [illegible] recommended [illegible] the blistering [illegible]

disfigurement, while it relieves the pyrexia and cerebral symptoms, should they be present. The *rationale* of the benefits arising from the method, appears to me to be comprised in John Hunter's observation, that, "if you can succeed in changing the character of an inflammation, you will often succeed in curing a specific disease;" which he calls "the mode of cure by an irritation different from the disease;"* for he holds elsewhere, that "no one disease can have two distinct and different critical inflammations." Within the last fortnight, I have had opportunities of testing the efficacy of the plan above advocated in two successive instances; the first occurred in the daughter of a well known F.R.C.S., residing in my neighbourhood, whose obliging note I enclose in verification of my remarks.

"My dear Sir,—In reply to your inquiries, I beg to say that, in the case of small-pox that occurred in my own family, I am inclined to attribute the absence of all pitting to the timely application of the blistering fluid. Of course, it is impossible to say that any marks would have been left by the disease had that fluid not been applied; but, judging from the results left in cases of not greater severity that have come under my care, I am inclined to think there would have been marks."

The other case is that of a patient at the Skin Hospital, residing near that Institution, but whose occupation, that of beer shop keeper, would be injured by the publication of her exact address: I enclose her letter, however, from which the required extracts can be made, suppressing the name and residence:

"I came to the Hospital for Diseases of the Skin; my case was small-pox; and I am thankful to your skill, which, under the blessing of Almighty God, has prevented my face being marked: my hands, arms, etc., are much scarred, but my face is almost without a mark."

In conclusion, I may mention, that in two or three other instances, besides that of the patients above cited, I have had the satisfaction of finding that those pustules only have left pits, which have escaped vesication by the above process; at the same time it must be borne in mind, that further experiments are needed to verify my experience, which is comparatively limited in this class of cutaneous ailments; I , therefore, that my bretheren with wider opportunites than my will give the method a full trial, and communicate the result to

* Hunter on the Blood, Vol. II. page 131, et seq., Vol. I. page 454.

the profession. Of course it can scarcely be deemed applicable to the severest cases, but in the distinct and partially confluent forms of small-pox I think it will be found to justify what has been herein stated.

I am, &c.,

3, Saville Row, February 11th, 1857. JAMES STARTIN.

Homœopathic Treatment of Cholera in India.

(*Extract from a letter from* REV. W. PRYSE, *dated April 7th*, 1856, *Sylhet, East Indies.*)

The Cholera has again visited our town, and has been very fatal in the villages round about us during the last month. The second of our little company has sickened this afternoon. The first attacked is now quite recovered. We use the homœopathic system of medicine. I do not speak in its favor from prejudice, but from conviction of its superiority. Messrs. Steinforth and Skipworth very kindly presented us with books on this system of treatment to the amount of ten pounds, and Mrs. Skipworth furnished us with medicine to the amount of five to six pounds. Scores of the poor Bengalees bless her and her medicine. From ignorance on these matters I cannot speak of its success in England, but of this I am happy to say that it has not failed *in any one instance* when I have made use of the medicine in time. 'This is from the Lord,' and He keeps us all from fear of evil.

Poisoning by Belladonna.

Mr. Th., having suffered for some time from pain in the back, palpitation, and dyspeptic symptoms, consulted on October 4th a physician, who prescribed nitro-muriatic acid, and a belladonna plaster, 9 inches by 6 inches, for the back. The plaster produced a crop of pustules, though the patient was not aware of it.

At 10 a.m., October 14, he removed the old plaster, and applied on the same part, now the seat of the pustules and of a few minute ulcers, a new one of like size.* At this time he felt particularly well. Soon after ten he left home. Between eleven and twelve,

* Both plasters were obtained from Mr. Bell, Oxford Street.

while in the city, he noticed that his tongue and throat were extremely dry, and that his tongue was covered with a white, clammy fur, which he could pull off in strings. The sense of dryness and discomfort of the tongue and throat were most distressing, and such as to impede articulation. At the same time he was affected with extreme desire to micturate, though he could pass only a few drops of perfectly colourless urine. From this time till he lost consciousness his desire to pass urine was constant; wherever he could retire he did so, but succeeded in expelling from the bladder, with considerable effort, only a few drops of colourless fluid. The sense of dryness of the tongue and throat continued to increase, and he soon began to feel a litttle confused in his head, so that he was fearful people would think he had been drinking. He transacted all his business correctly, though at his office, where he was between two and three o'clock, it was observed that there was something strange in his manner and speech. Here he drank some water, which seemed even to increase his sense of dryness of the tongue. He drove himself home, which he reached about three o'clock. His mind, by this time, was a good deal confused, and, feeling himself unable to pay his men, he placed the money he had just drawn from the bank in safety in his own room. Soon after he had, five or six times in quick succession, convulsive catchings of the extremities, face, and trunk, such, he says, as animals have when bitten by venomous serpents;* then his mind began to ramble, and his ordinary medical attendant, Mr. Knaggs, of Kentish Town, was sent for. When Mr. Knaggs arrived, Mr. Th. was very delirious, but still recognised him.

I saw the patient about six p.m., at Mr. Knaggs' request. We found Mr. Th. much worse than when Mr. Knaggs had left him. He was standing by the bedside, supported by two men; he seemed to exercise very little control over the lower extremities, and to have very little power in them. It was clear that he must have fallen to the ground had he been left without support. He leaned a little to the right, as though the right side were weaker than the left; but then those about him told us that shortly before he had inclined to the left side. He was led, at my request, to the opposite side of the room, both legs dragged, but neither one more than the other. He was restless in the extreme, and would not lie down for an

† Mr. T. is employed in the Zoological Gardens.

instant; his hands were in constant motion, he seemed as if he were busy moving some light objects. Occasionally, he raised his feet alternately some distance from the ground, as one does in ascending stairs. He moved his mouth incessantly, evidently with the idea that he was talking; but the sounds that he uttered were inarticulate, and altogether unintelligible. He paid no attention to those about him; in fact, seemed unconscious of their presence, only now and then, when addressed in a loud voice, he stared at the speaker for an instant, like one suddenly aroused from a sound sleep. Once he laughed, when bid to put out his tongue, and in the most rapid manner protruded it, and then as quickly withdrew it. There was a little deviation of the face to the left, though not more than is natural to many adults, and is, I think, proper to Mr. Th. The pupils were very large; when the candle approached them, they acted equally, but imperfectly and sluggishly. The head was warm, but not warmer than the surface generally; the face was a little flushed. There was no throbbing of the vessels of the neck or head.

The pulse was between 80 and 90, and regular. The heart's action was tolerably strong; the left ventricle was hypertrophied, and a loud, double, endocardial murmur was heard at the base.

The history of the symptoms before Mr. Knaggs saw the patient was only obtained from him after his complete recovery, and so some doubt was at first entertained as to the nature of the case. Still, as the symptoms agreed with no disease of the brain or meninges with which I was acquainted, while the majority were such as occur in poisoning with Belladonna, we thought it highly probable that they were due to absorption of Belladonna by the skin. The plaster was accordingly removed at once, and the surface greased and washed, and clean linen put on, some of the Belladonna having passed on to the shirt. A blister was applied to the back of the neck, and an aperient, with five grains of Sesquicarbonate of Ammonia, directed to be given every two hours. The first dose of the Ammonia produced such decided improvement, that Mr. Knaggs gave a second dose in half-an-hour; this was followed almost instantly by perfect consciousness.

The next morning Mr. Th. was able to arrange his accounts, though he had not slept for an instant. He had no sleep the following night, and his memory for two or three days was very defective. He does not remember anything that passed between Mr. Knaggs' first visit (and even of that he has only a dim recollection), and his

return to consciousness, about 10½ or 11 p.m. He is now quite well, with the exception of slight dimness of vision, and dilatation of the pupils, and a consciousness of a little impairment of memory. There does not seem to have been any eruption on the skin, excepting the pustules, nor any itching on the surface.

I am induced to publish the case, first, because the cases of poisoning with Belladonna occur but rarely, and it is, therefore, desirable that the symptoms noted in particular cases should be recorded; and, secondly, because of the practical bearing of the case in regard of the caution it enforces as to the repeated application of Belladonna plasters to the same surface.—(Dr. Jenner, in *Med. Times and Gazette*, Nov. 22, 1856.)

Shocking Conduct of a Surgeon.

If we may judge of the enormity of a crime by the profound impression it creates, we must reckon among medical *crimes célèbres* the awful transaction that has recently called down the editorial thunders of our youthful contemporary, the *British Medical Journal*, and moved the Liverpool Infirmary magnates to meet in solemn conclave, in order to crush the offender by denouncing the offence. We shall proceed to describe the unpardonable sin that has been committed by one who has hitherto enjoyed a respectable reputation among his brethren, but before doing so we would beg our readers to prepare themselves for a tale of villany such as it has seldom been their lot to peruse. We doubt if the annals of medicine offer a parallel to the monstrous conduct of this medical renegade, or if anything that has occurred in connexion with our profession has caused such a universal thrill of indignation among a certain circle of our colleagues. The facts of the case, as we gather them from the correspondence of the *British Journal*, are these:—On the 25th of March, 1856, a telegraphic message reached Mr. Long of Liverpool, which ran as follows:—"George Wilkin, Shrewsbury, to James Long. Can you come this evening to see Mr. C——, of S——, if required? a surgical case." This George Wilkin, as Mr. Long very well knew, was a homœopathic doctor, who had removed from Liverpool to Shrewsbury, and who had been expelled from the Provincial Medical Association for practising homœopathy. What then should Mr. Long have done on receipt of this message? Well, we cannot exactly say, but apparently he did the very thing that he ought not

to have done, for he replied affirmatively, and actually went down to S——, and then gave his advice and surgical aid without previously insisting on the instant dismissal of Dr. Wilkin, in whom alone of all the Shrewsbury doctors the patient and his family had any confidence. Nay, Mr. Long was so lost to all sense of propriety that he actually conversed with the homœopathist, probably shook hands with him, certainly listened to the history of the case detailed by Dr. Wilkin; thus showing that he did not view the homœopathic doctor as a creature to whom should be denied all the courtesies and civilities of professional and social intercourse. Conduct so outrageously at variance with all that the right-minded legitimate practitioner holds to be correct, could not be allowed to pass unnoticed, and accordingly, the *British Medical Journal*, the organ of the Provincial Association that distinguished itself at Brighton by passing those famous resolutions whereby homœopathists and all who met with or held any professional intercourse with homœopathists, were placed beyond the pale of the Association—this *British Medical Journal*, we repeat, thundered forth its anathema maranatha against the delinquent Long, and very properly held him up to the scorn of every properly thinking medical man. "Ah! Mr. Long," exclaimed the editor, "had you but been a member of the Association, you would have been properly punished by summary expulsion from that assemblage of the *élite* of the profession, as Mr. Edwards recently was for a similar offence." Week after week the editor or some correspondent of the *Journal* returned to the attack upon the surgeon who had so disgraced himself and his profession as to meet at the bed-side of a patient requiring surgical assistance, a physician who was in the habit of prescribing remedies according to the only therapeutic rule of general application that has yet been discovered. How nobly does the conduct of the chief surgeon of Shrewsbury contrast with that of the Liverpool operator. He, too, had been asked to give his surgical assistance to the patient, but he magnanimously refused to enter the house unless the medical attendant was at once dismissed. The stupid patient and his friends could not see why a surgeon should refuse to open an abscess or two because the patient preferred globules to blue pills. But the Shrewsbury surgeon was President of the Shrewsbury Medico-Ethical Society, and therefore he knew better than to draw his lancet on behalf of a man who wilfully persisted in refusing to swallow the delicate preparations of the allopathic la-

boratory. For medico-ethics, as every one knows, consist mainly in the repudiation of homœopathy, and all the medico-ethical societies throughout the country have, we believe, as a fundamental principle, that the profession of homœopathy is degrading to a medical practitioner, and, as a fundamental rule, that any member who practises homœopathy, or meets a homœopathist in consultation, thereby places himself under the ban of the profession, and incurs the penalty of expulsion from the society. In fact, it was the progress of this detestable practice that called these ethical societies into existence. Ignorant non-medical persons might, perhaps, wonder how ethics can take cognisance of a therapeutic doctrine and practice, but they do not know that the connexion of ethics with therapeutics is one of the great medical discoveries of the day. To purge, puke, bleed, blister, cauterize, and salivate, is to act in strict conformity with medical ethics, but to give sweet or tasteless medicines, that inflict no pain, disgust no palate, and weaken no constitution, is to sin against medical ethics. To prescribe bleeding and blistering in pleurisy is correct behaviour, but to give Aconite and Bryonia in that disease is ungentlemanly in the highest degree. To treat pneumonia so that 25 per cent. of the cases die is ethical—to treat that disease so that only 4 per cent. die is un-ethical in the highest degree. Medical ethics demand that a surgeon shall on no account lend the aid of his knife to a patient who prefers the mild medication of homœopathy to the perturbative treatment of allopathy, "dût-il crevare." Medical ethics allow practitioners to adopt every different variety of treatment in the same disease, except the one that experience, corroborated by the statistics of numerous hospitals, has shown to be by far the most successful. Finally, medical ethics hold up to the reprobation and contumely of medical men, a large number of their professional brethren, possessed of the best medical qualifications in the shape of degrees and diplomas, well-educated, industrious, and of unimpeachable integrity, men who enjoy the confidence of a large circle of patients, and who have generally expended more than the average time in mastering their profession, but who administer their medicines, *in all cases*, according to a therapeutic rule which has in all ages, from the time of Hippocrates, been recognized as true *in some cases*, and may be true in all, for anything that its opponents have yet shown to the contrary. Medico-ethical societies might with perfect propriety be termed anti-homœopathic societies, for in fact they are nothing else.

Mr. Long did not prove an altogether hardened and obdurate

sinner. The wrathful denunciations of the *British Medical Journal*, and of its correspondents, at length called forth from him an apologetic letter, in which he tries to shuffle out of the awkward position in which he finds himself. He says he does not know if Dr. Wilkin does or does not practise homœopathy, and yet on first seeing the patient, he says, with strange forgetfulness, that he told him and his friends this was no case for homœopathy. And even after this talk about homœopathy, and after hearing from Dr. Wilkin that the Shrewsbury surgeon had refused to attend the case on account of Dr. Wilkin's homœopathy, he goes a second time to see the patient on Dr. Wilkin's summons. In fact, Mr. Long flounders hopelessly about in his apology, putting his foot into it in a manner very sad to contemplate, and making matters very much worse byhis explanation. The fact of the matter is, he has transgressed the fundamental law of medical ethics, and struggle against it as he may he must pay the penalty of his fault. This he is very soon called on to do. A meeting of his colleagues in the Liverpool Royal Infirmary was held on the 18th of February, to take Mr. Long's conduct into consideration, and then the explanation was read, but considered to be not sufficiently explicit. Mr. Long thus driven to bay, cried "peccavi," in the most abject manner. "If he had known," he said, "that he should have been placed in such a position as to have met a gentleman who had the reputation of practising homœopathy, he would not have gone to the case." Oh, Mr. Long! Mr. Long! *if you had known*—why, by your own confession, you knew quite well. You knew Dr. Wilkin in Liverpool, and could not, surely, have been ignorant that he practised homœopathy there; but supposing you were, you cannot plead that excuse for the second visit you paid to Mr. C——, at the summons of Dr. Wilkin. However, Mr. Long's colleagues were not disposed to visit too severely the repentant sinner. So they accepted his humble apology, and unanimously joined in the following resolution, by way of *Te Deum*:—"That in the opinion of this meeting, it is not in accordance with professional etiquette to be associated in the treatment of disease with any one who practises homœopathy."

And so the matter terminates for the present.

What a commentary is this episode on the boasted liberality and humanity of the medical profession in this nineteenth century! A well-educated, legally qualified practitioner of Shrewsbury cannot procure the assistance of the surgeons of that town to perform a surgical operation, because he differs from them on a subject in

regard to which no two of themselves are agreed, but is forced to send to Liverpool for one. The Liverpool surgeon obeys the summons, and for so doing is assailed for three whole months in a weekly medical periodical, and the whole profession simmers and boils with indignation. The surgeon, a man of eminence and talent in his profession, is cowed by the unreasonable clamour, and demeans himself by pitiful prevarication, in order to ward off the wrath of his colleagues.

Of all the effects which the discovery of Hahnemann has produced on medicine this surely is not the least remarkable, that it makes those opposed to it, men otherwise proverbially humane, honourable and liberal, condescend to acts of cruelty, meanness, and persecution which could scarcely have been exceeded in the dark ages.

The Eryngium Aquaticum.

By Dr. Wilkin.

I send you all the information I at present have about this medicine, in an extract from Hill and Hunt's work on Surgery—article Spermatorrhœa.

"For spermatorrhœa properly so called, or emission of semen without erections, there is no remedy which has yet received the sanction of experience."—*Repertory.*

We have one, however, to propose for trial,—it is the Eryngium Aquaticum, which has two remarkable cures reported by Dr. Parks, (Pharmaceutist, Cin.) to recommend it.

Case I.—A married man injured his testicles by jumping upon a horse; this was followed by a discharge of what was considered semen for fifteen years, during which time he was treated allopathically and homœopathically. Dr. Parks exhibited a number of the usual remedies without permanent benefit. He then gave a half grain dose three times a day, of the third decimal trituration of the "Eryngium Aquaticum." In five days the emissions were entirely suppressed, and have not returned to this time (over two years ago). The emissions were without erections day or night, and followed by great lassitude.

Case II.—A married man, not conscious of having sustained any injury, was troubled for eight or ten years with emissions at night—with erections. The semen also passed by day with the urine. The

loss of semen was followed by great lassitude and depression, continuing from twelve to forty-eight hours. There was also partial impotence. Had been treated allopathically. Dr. Parks gave him Phos. Acid for two weeks, without material benefit. He then exhibited the Eryngium Aquaticum, as above, with like excellent and prompt result.

The Lancet on Homœopathy.

We copy the following piece of mouthing invective from the *Lancet.* Our ancient—not venerable, but evidently rusty—contemporary, reminds us of some silly old woman, who not having any arguments in her foolish head, makes up for her want of reason by clamour and scolding. We can well afford to laugh at the epithets applied to us by our angry opponent. He will hardly find among those who have derived advantage from homœopathic treatment, and they may be reckoned by millions, any so "weak-minded" or so "silly" as to feel aught but contempt for this tirade of abuse.

"The homœopath is one whose philosophy is to expect something from nothing; whose logic is comprised in assertions without proof: whose moral mechanics require a fulcrum of credulity to work on; who sacrifices the right to the expedient; who places his trust in crying out one thing, and crying that one thing very loudly; who is occasionally a very clever man with a bee in his bonnet; is sometimes a knave, sometimes a fool, and often both; who is a great teatable physiologist, and luxuriates in scientific lectures adapted to the meanest capacity; who, like the ass in the lion's skin, takes advantage of degrees legitimately obtained to practise in a manner diametrically opposed to the belief he expressed for the purpose of obtaining them, and who calls this honesty; whose influence is almost entirely exercised on weak-minded men and silly women; and who considers that rowing against the stream of science is the way to arrive at the ocean of truth."

CLINICAL RECORD.

Ophthalmia neonatorum.

An article having appeared in Hirschel's Zeitschrift, from the pen of Dr. Battmann, in which the efficacy of the homœopathic treatment of the above disease was doubted, and five cases given where the homœopathic medicines failed to relieve, but which were

cured by the external employment of copper, Dr. Rückert, of Herrnhut, publishes the following counter-statements and facts.

"Dr. Battmann will allow me to make the following observations. *Belladonna* is not one of the remedies recommended in this disease, it has proved of little use in clinical experience, in blennorrhagic ophthalmias, and was used by Dr. Battmann in too strong and too often repeated doses, hence, no effect was produced on the abnormal secretion. Dr. Battmann, moreover, gave *Rhus*, *Merc.*, *Hep.*, *Dulc.*, without success. Of these, *Dulc.* is recommended both by Jahr and Hartmann; but our homœopathic literature furnishes us with only one imperfect example of a cure being effected by *Dulc.* That *Hepar*, which is so useful in simple and scrofulous ophthalmias, especially when the Meibomian glands are much affected, may also occasionally be useful in ophthalmia neonatorum, I do not for a moment doubt. Dr. Battmann says nothing about the doses, and their repetitions, in the cases given, nor does he with respect to *Rhus.* three cases of cure by which are on record. I miss among the remedies employed, two which have been proved efficacious in this disease, viz: *Lycop.* and *Sulph.* The latter remedy is particularly indicated by its pathogenetic effects, and I had, recently, an opportunity of testing its curative power, in two cases of ophthalmia neonatorum.

1st.—A female infant, 5 weeks old, was brought to me on the 30th June, 1856. On the day after the birth, inflammation appeared in both eyes. Nothing had been done but washing out the eyes with warm milk and water, and the disease had advanced to the most intense degree. The lids of both eyes were very much swollen, and on opening them, a large quantity of matter gushed out. It was impossible to ascertain if the cornea was still transparent or not, for the opening between the swollen lids, and the turning up of the eyeballs, precluded all view of it. I gave, immediately *Sulph.* 30, two doses; and as the child had to go to some distance, and could not be daily observed, and the 30th dilution might not be sufficiently powerful, I gave some *Sulph. tinct.* 2 and 30, to be taken, alternately, every two days—7th July. The very day after giving the first dose improvement commenced. The child was able to open the eyes, and look up, in the dark, but the parents could not ascertain their exact state. The swelling and suppuration were greatly diminished; but to-day, the seventh day of the treatment, the child had opened its eyes in the light, and they appeared

quite clear to the parents. I gave four more doses of *Sulph.* 30, to be taken every four days; and in the beginning of September I saw the child, and found it perfectly recovered, without any traces of the disease.

2nd.—A male infant, 5 weeks old, born in the same village, and on the same day as No. 1, and also affected with ophthalmia neonatorum immediately after birth, was brought to me for advice on the 2nd July. The state of the eyes was precisely the same as in No. 1, only it sometimes tried to open its eyes in the dark. It cried more, and tossed about its arms and legs. I gave *Sulph.* 30, and *Sulph.* 2, two doses of each, as in the preceding case.—9th July. Going on well; the eyes already more open; less photophobia; instead of pus, the discharge was more watery in character. Four doses of *Sulph.* 30, every four days, sufficed to complete the cure.

Chronic catarrh, &c.

A woman, aged 39, had complained for five weeks of vertigo, deafness, and noise in both ears, dyspnœa, much cough and yellow expectoration, sometimes brought up easily, at other times with difficulty. The week before I saw her, she had menstruated, but scantily; she had now acrid leucorrhœa more copious than usual. She had taken some pills without good effect, *Puls.* 4, 12 drops in water,, 1/12th, three times a day. This cured her. (Käsemann, Hirschel's *N. Zeitschrift*, I, 95.)

Gastric affection.

A man, aged 59, strong, and previously in good health, had been 8 days ill. He feels as if bruised all over; little appetite; great thirst and longing for cold water; bowels regular; sleeplessness; pains under right ribs, in the stomach and bowels; tense abdomen; salt taste; in the early days of his illness, eructation; severe cough, with mucous expectoration. An allopathic doctor prescribed something that did no good, but on the contrary, made him worse. *Nux vom.* 4, three drops in twelve teaspoonfuls of water, one every two or three hours. Result. Immediate improvement, and rapid recovery. (Käsemann, Hirschel's *N. Zeitschrift*, I, 86.)

Gastralgia.

A man, aged 52. On the 12th March, 1851, he was quite well, but he went in the evening to a bible class, and returned with violent

pains in the abdomen, went to bed, and there became almost mad with pain—tearing the bed to bits, &c.; once he vomited water, and some half digested food. His abdomen is swollen and tense; feet cold; heat and perspiration. *Bell.* 3, four drops in twelve teaspoonfuls of water, one every half to one hour.—13th March. The pains quickly declined, and are now quite gone. He sleeps well, and perspires. After a few more doses of *Bell.* 4, he was quite well. (Käsemann in Hirschel's *N. Zeitschrift*, I, 94.)

Case of Perspiration of Feet by Dr. Wilkin.

The case of a servant girl of the name of Nora Bryon was submitted to me for treatment by Judge N— of the East Indies, who is at present on leave in this country for the sake of his health. It was communicated to him by his sister, Mrs. Capt. B. of the 86th Depôt, Chatham.

From the able and characteristic description given of it by Mrs. Capt. B., in Extract No. 1, I had little or no difficulty in selecting and recommending the most likely homœopathic remedy—Secale cornutum. Although the alternation of Sepia with this medicine was suggested, it yet appears that the Secale was alone given, and with what result Extract No. 2 of the correspondence shews. The choice of the remedy and the reason of its efficacy will be so apparent to every homœopathic practitioner, as to render any comment on the case, &c. unnecessary.

Extract No. 1.

Nov. 4th. 1856.

* * * * "By the way our servant has a sister who is suffering from a very peculiar disease in her feet; I never heard of such a complaint before and dont understand it, and I fancy the M.D.'s are equally puzzled, for they tell the poor girl that if any thing is done to prevent the development of the symptoms it will cause her death. She appears a strong healthy girl in other respects. She is leaving her place in consequence of it, the pain being so great she is scarcely able to walk, and the perspiration is so excessive and offensive that it destroys both boots and stockings; the latter she is obliged to change three or four times a day. The soles and round the edges of her feet are perfectly white and unnaturally smooth and soft, with spots of a bluish white color all over. They do not swell, but are extremely tender. She has only suffered from them about two months. She is about 18 years old, and quite well in every way." * * *

Extract No. 2.

November 24th, 1856.

* * * * "I must tell you of the almost miraculous success of the prescription you sent me for the poor girl. On the third day from the time she commenced to take the medicine, she declared her feet felt considerably better, and the improvement has continued so satisfactorily since, that she is now quite well. They have assumed their natural color, are entirely free from pain, and do not perspire excessively,—in fact, the cure seems so perfect, that it appears unnecessary for her to take any more medicine unless the complaint returns. We had no Sec. corn. of the third dilution, so I gave the twelfth instead, but I suppose it was not of much consequence. At all events, the effect is everything we could desire. I should have written to you sooner, as you requested, but it is so difficult to instil into the people of this class the importance of regularity, that she neglected to take the medicine on several occasions at first, so that she only completed a week's regular taking of it on Saturday. She has now ceased till I hear from you again; but I saw her to-day, and the result continues the same. I have questioned her particularly about her general health, and it does not appear to have suffered *at all* from the removal of this strange complaint,—as the allopathic M.D. told her it would—indeed you could seldom see a more robust looking girl." * * * *

Another communication has been received within these last few days, which states that the result continues the same, and the girl herself affirms, "that she was never in better health."

BOOKS RECEIVED.

General and Special Therapeutics of Mental Diseases, by Dr. G. H. G. JAHR. Translated by J. W. GALLOWAY, M.D. Turner, Manchest. 1857.

The use of Glanderine and Farcine in the treatment of Pulmonary and other Diseases, by J. J. G. WILKINSON, M.D. Lond: White, 1857.

Der Rheumatismus und Seine Heilung durch Teplitz, von Dr. PERUTZ. Dessau, 1855.

Teplitz-Wirkungen und Haut Krankheiten, von Dr. PERUTZ. Prag, 1856.

The Monthly Homœopathic Review.

Journal de la Société Gallicane.

Smith's Homœopathic Directory of the United States. 1857.

Wm. Davy & Son, Printers, 8 Gilbert Street, Oxford Street. [W.]

THE

BRITISH JOURNAL

OF

HOMŒOPATHY.

ON SOME LESIONS OF THE NERVOUS CENTRES,

By Dr. Rutherfurd Russell.

(*Read before the British Homœopathic Society, May 28th,* 1857.)

At the last annual assembly of this Society I had the honour of bringing under its notice some cases illustrating morbid affections of certain nerves: I propose now to direct attention to some affections of the brain and spinal cord, rather, I confess, in the hope of deriving information from the experience of others, than of affording much light either in the diagnosis or treatment of this unmanageable class of ailments.

The first member of this class in point both of importance and frequency, is undoubtedly epilepsy. I do not intend, however, to enter upon a general discussion of this dreadful malady, but I mention it that I may have an opportunity of repeating, that hitherto my experience has been more in favour of Belladonna than of any other medicine in the treatment of epilepsy, and that I have found benefit in many cases of long duration and great severity by persevering for years in the daily use of Belladonna; and I wish also to mention a curious case that is now under my observation, as illustrating the pathology of the disease. Dr. Brown Sequard states that he found he could produce true epileptic attacks in certain animals by wounds of the spinal cord—at least a series of general convulsions returning

at regular or irregular intervals. From this he argues that epilepsy is in some cases owing to a morbid condition of the cord, a state of preternatural irritability, and he agrees with Dr. Marshall Hall in supposing that the immediate cause of a fit is the closing of the larynx and the suffocation of the epileptic person, that this prevents the entrance of air into the lungs, that the blood is no longer arterialized, and that venous blood acts as a direct irritant poison to the spinal cord. This theory represents the conditions of epilepsy to be a chronic state of preternatural irritabiltiy of the spinal cord, which gives a tendency to spasmodic closure of the larynx, that the suffocation thus induced converts the chronic into an acute condition, and the paroxysm is owing to the venous blood permeating the cord, which is morbidly sensitive to this poison. Now I have under my care a case of cyanosis, and the unfortunate subject of this congenital malformation, besides the ordinary symptoms of the disease, is subject to attacks of general convulsions of his whole body on any exposure to an unexpected excitement, such as a sudden noise, intelligence of a painful or pleasurable character, in short every thing which excites the nervous system either morally or by sensation, produces an attack of general convulsions which lasts from ten to twenty minutes, and resembles true epilepsy in every respect but one, and that is he never loses his consciousness, but gets excited. Is the cause of these pseudo-epileptic fits the presence of semi-venous blood in the arterial vessels of the spinal cord?

I cannot resist the observation that the action of Belladonna both on the brain, the spinal cord, and the nerves of the larynx, has a marked affinity with this view of the pathology of epilepsy. Dr. Marshall Hall classes epilepsy with hydrophobia, as in both the spasms of the larynx are of the greatest importance, and Dr. Brown Sequard represents epilepsy as curable by cauterizing the larynx so as to prevent its being thus affected by spasm. Of the power of Belladonna over spasms of the larynx there is no doubt, and thus this remedy may act beneficially by at once modifying the preternatural susceptibility of the cerebro-spinal centres, the predisposing cause of a paroxysm, and arresting in its incipient stage the spasm of the larynx

through which the smouldering disposition to a fit is roused into active reality.

I have another very interesting case at present under my charge, the history of which presents the following outline: a young officer, of perfectly temperate habits, addicted to athletic sports and to no vicious indulgences of any kind, and usually in the enjoyment of excellent health, mounted his horse for a ride. He was in the ordinary undress of the Army in India, the scene of his accident. While pulling on a pair of stiff military gloves his horse bolted off at full galop and made for a low open stable door. Seeing that if he allowed himself to be carried into it he would be killed, the officer threw himself off, and fell upon his head. He was picked up by his native grooms, and put upon the horse again. He rode a little way with another officer, who observing his manner strange took him back to his house. On arriving at home he was lifted from his horse and laid upon a sofa; it was then found that his skull was fractured. He remained unconscious for some time, and then had a brain fever. He has been an invalid ever since, a period of above 20 years. He now states, that from the time of his fall to the time of his recovering his senses after the fever, he remembers nothing; that he must have acted automatically, or, as Dr. Marshall Hall would say, by the reflex action of the spinal cord alone, without any cerebral activity, and in this condition he rode some half-mile, and spoke, although incoherently.

At present he is rather thin, and his countenance has an anxious expression, otherwise to the casual observer he seems to be perfectly well. But he complains of feebleness of his limbs, and is exhausted by a short walk or by any excitement. There is a mark upon the right posterior and inferior part of his head, about three inches in diameter, with two eminences where the skull was fractured, and there is constant numbness there and sometimes pain. Besides he complains of pain rising from a sensation of weariness to considerable severity on any fatigue, at the lower dorsal and upper lumbar vertebræ. This he has had since his fall. He also is much distressed by a dragging sensation in the testes, and seminal emissions produced by any mechanical irritation, as riding, with total absence of all

erotic feeling, and entire impotence. His dreams are very peculiar; he fancies that he is swinging to an immense height in the air, head foremost, the swing is across the dome of St. Paul's. This is a frequent dream, and has been for years. His nights are very restless. His appetite and digestion are good, but when he first consulted me he suffered much from constipation. His pulse is rather feeble; he gets soon chilled.

Such are the most striking features of a case which presents many interesting traits. We may assume a serious lesion of the posterior part of the brain, and possibly of the cerebellum as certain, but whence comes the pain of the back? There are three possible causes. He may have fallen upon his back after striking his head; he was dressed in white trousers and a shell jacket, so that there was nothing to save him in his clothes; or it might be a contre-coup, the shock of the spinal cord resulting from the pitch on the head; or, lastly, it may be that the cerebral and cerebellar lesion has excited a preternatural sensitiveness of the genital organs, which act by their nerves upon the spinal cord (as in masturbation) and that this has induced a permanent weakness of the part.

The peculiar dream of swinging upwards is very interesting. We know that injury to certain parts of the brain induce a tendency to turn or to roll, while cutting other parts makes a bird try to soar. Now doubtless this dream of ascent is in consequence of an injury to the same parts of the brain in this patient as corresponds with that part of the pigeon's brain the injury to which prompts the bird to mount. The reason of the sensation only occurring in sleep and giving rise to a dream, and not a movement, is obviously that the attention is too occupied in the waking condition with external impressions or internal perceptions and emotions to be alive to this dull, dumb, excited, animal instinct. It is satisfactory to be able to say that this patient has improved much by treatment. He has got much stronger, he sleeps better, and has fewer uneasy sensations. The medicines which have done it are Naja, Silicea, and Arnica.

The next case was also the result of an accident. I was consulted last March by a remarkably large, and power-

ful man, at 40 years of age, who stated that four years ago he fell from the top of a house, a height of 40 feet; he lighted upon a flat surface and quite prostrate, so that his abdomen was the first part of his body to come in contact with the ground. From that day he became the victim of constant pain felt in all parts of the body. The moment he awakes in the morning he is sensible of severe pain in his back and loins, which extends to the shoulders and arms and down the legs. He has never been without this since the accident, but it varies much in degree and is aggravated by exertion. There is no headache or numbness, no wasting of the muscles, the appetite is good, the urine natural, and the sleep sound. The bowels are sometimes bound and sometimes relaxed. There is no pain on pressure either of the abdomen or back. The treatment in this case was followed by speedy and complete cure. For a fortnight he got Naja, but reported himself no better; he then got Belladonna, and returned on the following week free of all pain. I saw him last on the 11th of this month (May), and he was still perfectly relieved of the sufferings which he had endured without intermission for four years. The pathology of this case I take to be a shock to the spinal cord, either direct or indirect; in the latter case it must have been transmitted by the nerves of sensation to the posterior column, and given rise to a morbid action which displayed itself by a general hyperæsthesia. The rapidity of the cure in this case was quite unexpected, and is a proof on how slight an organic derangement a constant and severe perversion of function may depend. I think the case is interesting as throwing light upon the possible cause of disordered action in what is called spinal irritation.

There are three distinct classes of spinal affections, presenting certain common features, and sometimes difficult to discriminate from one another, but radically different in their nature, and consequently in the treatment they require. Under the first head may be classed those serious cases of structural disease of the spinal cord which go on from bad to worse and terminate in permanent contraction or palsy of the limbs, or slowly improve and eventually recover. Under the second head we may class

all cases of idiopathic spinal irritation, and under the last head cases of sympathetic spinal irritation.

The following case reported by Abercrombie is a good illustration of the first class: "A medical gentleman, aged 30, who had been for several years in the navy, returned home in perfect health, and was living in Edinburgh, when he was observed by his friends to drag his legs awkwardly in walking. He was not himself at first sensible of it, but soon perceived a weakness and want of command over both his legs, which gradually increased to nearly perfect paraplegia. Some time after the affection of the legs took place he began also to lose the power of his arms, and this also increased till he retained in them only a very feeble and unsteady power of motion. They were also frequently seized with convulsive startings, so that any article which he attempted to hold was thrown from him with violence. The legs often started in the same manner, and were thrown about with considerable violence, especially when he attempted to move them while he was sitting up. No disease could be discovered in the bones of the spine, and he was otherwise in good health, until about two years after the commencement of the complaint, when he was seized with phthisis, of which he died in September, 1822. I examined the body with the utmost care, and could not discover a vestige of disease, either in the brain or the spinal cord." That in this case there was some inscrutable structural disease will hardly be doubted, and most probably this [illegible] have been incurable under any treatment. [illegible] such under my care, and the result has [illegible] But it is impossible at the [illegible] to [illegible] and an incurable [illegible]

For example [illegible] who walked wit[illegible] He stated that [illegible] cold and wet, and [illegible] the lumbar region [illegible] wards, and that soon [illegible] in his legs. These sym[illegible]

my seeing him. He complained then chiefly of weakness in his legs and back, and it was with the utmost difficulty he rose from his seat, and shuffled along with the assistance of his sticks. In other respects he was quite well, except that his legs were always cold and his urine too copious. He had been for six months in a hospital before he applied to me. This man got quite well. Secale was the first medicine he got, and it seemed to do him good; the other medicines which apparently were most useful were, Sulphur, Arnica, Silicea, Rhus, and Naja. The cure occupied about six months, and he was then able to resume his work.

I had another striking case of a woman 60 years of age, who for two years had suffered constant pain in the back, with numbness of the legs and almost total inability to use them. She gradually improved, and almost wholly recovered under the use of Secale, which she took steadily for about three months.

Although the term spinal irritation has been vaguely applied, surely Romberg goes too far when he says: "If we subtract the spinal pain which accompanies the diseases of various organs, for instance, the stomach or the liver, and which is increased by internal pressure, and often associated with pain at the epigastrium, the doctrine of spinal irritation is deprived of its entire foundation, and takes its place among the fictions which have always found their way into pathology when physiology was undergoing a revolution, and hence for a time have been admitted as matters of fact."—(*Romberg*, vol. i, p. 155.)

Abercrombie, more philosophical, and as cautious as Romberg, always on his guard against admitting speculations in place of facts into pathology, contents himself with observing: "When we find, along with the complaints now mentioned (what we ould term spinal irritation), symptoms distinctly referable to pine, as pain or tenderness on a particular spot, it is fair to er this as directing our attention to an important seat of re is no doubt that these affections often appear om that can be referred to the spine, and in rces of irritation distinctly referable to ulty of recognizing a morbid condi-

tion with certainty, and of describing it with such exactness as to secure its recognition by all competent observers, is no reason for denying its existence. No doubt spinal irritation is often complicated with hysteria, generally with uterine derangement, still we not unfrequently meet with it as so well pronounced an individuality as to be unmistakeable and unquestionably worthy of a name. Here is a case in point:

I was consulted in March, 1856, by a lady about 30 years of age, who gave the following account of herself. She said she had been delicate from her childhood, had gone through both scarlet and typhus fever, and suffered from suppuration of the ear in early youth; that about four years ago she was attacked with cough, attended with tightness of the chest and slight hæmoptysis, for which she was sent to the Isle of Wight, where she soon recovered from all her chest ailments, but was from that time affected as at present. The affection I found to be excessive tenderness of the spine at the third and fourth dorsal vertebræ; this was so great that she almost fainted when I made the necessary examination; and I was sent for early the following day to try and relieve her of the extreme pain she had endured ever since I had examined her. She had not slept during the whole night, and could hardly help moaning. Besides this extraordinary tenderness of the spine, she complained of a short nervous cough; frequent shooting pain in the head, brought on by fatigue, relieved by going to bed; occasional swelling of the throat; neuralgic pain in the face; general languor and insufficient sleep. The catamenia were quite regular; there was constipation of the bowels.

Here was a case in which it was impossible to mistake the focus of the malady. There was manifest affection of the spinal cord, for no other morbid condition could have produced such long-continued pain in the spine aggravated by pressure. This morbid condition was not derived from the uterus, the functions of which were unimpaired, nor from any other viscus. It was an idiopathic affection [illegible] d what Dr. Romberg would have it called [illegible] purposes the term "s [illegible] true, had [illegible]

have revealed as little as in the case reported by Abercrombie, already quoted; but he did not on that account hesitate to refer the symptoms to some morbid change in the spinal cord, although he was unable to discern any such change. We are equally entitled to affirm the existence of a disease of the cord in this instance, although we cannot form any conjecture even what the precise nature of that change is. There was no opportunity in this patient for such a scrutiny as Romberg requires, for under the use of Arnica, Belladonna, Naja, and Sulphur, she got quite well in about eight months, and when I last heard of her, she was in the enjoyment of so much health and strength as to be able to nurse an invalid sister.

In cases like this one, of pure spinal irritation, I have great confidence in Arnica, Belladonna, and Naja.

Although the severity of the pain, and general sensitiveness of the system seems to indicate excess of vitality, at least of nervous irritability, yet the experiments of Brown Sequard rather point to an opposite conclusion. He found that a transverse section of the posterior columns of the spinal cord, instead of destroying or diminishing sensibility, was followed by a notable increase of sensibility of almost all the parts of the body behind or below the section.—(*Medical Times and Gazette,* April 26th, 1856.)

We frequently meet with another variety of spinal irritation where there is also great pain, but not attended with the languor and general hyperæsthesia; rather a sort of neuralgia of the spine. For this I have found Veratrum very useful. I look upon the distinction of the varieties of spinal irritation as very important, as probably the dissimilarity of the sets of symptoms depends upon some radical difference in the morbid change in the spinal cord. Neuralgic affections, although sometimes associated with spinal irritation, are a class of themselves; and Romberg observes that "Vaillez and others have made valuable contributions to our knowledge of cervical and intercostal neuralgia, and that alone has withdrawn a large class of affections from the sphere of spinal irritation, which its advocates are peculiarly fond of appropriating." The following case of intercostal neuralgia affords a good illustration of its entire dissimilarity from spinal irritation.

A woman of 50 years of age consulted me on the 8th of November, 1854. She stated that for ten years she had suffered constant severe pain in the chest under the left mamma. For the last two months it had been very violent. She had vomited blood. The affected side felt either too cold or too hot, generally the latter. The appetite was good and the digestion healthy. She got Ranunculus bulbosus, and came back in a week to report herself better. The same medicine was continued with good effect, and, along with a few doses of Nux vomica, entirely removed the pain.

There remains for our consideration the third class, which we have called sympathetic spinal irritation. The term is objectionable, but may answer provisionally, to distinguish all those affections of the spinal cord which depend upon excessive or irregular action in other organs, from those which have their origin in the cord itself. The first peculiarity that strikes one about this last class is, that it is almost exclusively confined to the female sex. The pains in the back which we meet with in men are chiefly rheumatic, unless they be from kidney disease, and they are comparatively rare. Among women they are almost universal, and differ chiefly in degree. The reason of this is manifestly the heavy periodic demands upon the centre of the nervous system to enable the catamenial discharge to take place. This regularly recurring effort at reproduction is attended with more or less of excitement and exhaustion. It involves in a slight degree what its completion, so to speak, conception and parturition, involve to a very great amount, a sacrifice of the individual vitality for the maintenance of the race. This is Nature's interdict against the insane attempts to assimilate the sexes in regard to their work. A woman for some thirty years of her life is subject to a periodic weakness, which should be more or less indulged by a certain degree of repose from toil, otherwise her constitution suffers. This is probably the reason why needlewomen come in such crowds to consult us for pain and weakness of the back; while, for my part, I do not remember to have had a single shoemaker or male tailor suffering from this cause. Now, although

needlewomen may sit somewhat longer than shoemakers, still the long twelve hours' seat of the shoemaker would undoubtedly break down a great number of women.

That the spinal cord is exhausted by these efforts, especially the parturient one, is too certain. I have for some time had under my charge a most melancholy illustration of this. The case is as follows:

A lady of about 40 years of age had been in the enjoyment of good health till after the birth of her last child, which is three years old. She had eight children in thirteen years. Soon after her confinement she began to experience a difficulty in walking: she could not lift her feet well. She then felt numbness in her hands and arms, and occasional severe pain. These symptoms gradually increased till she became so powerless in her legs as to require to be lifted on all occasions. Besides the inability of voluntary movement, she is subject to violent pain at particular parts of the limbs—one spot never free from pain is the insertion of the biceps muscle of the left arm—and to various muscular spasms: her legs, for example will be suddenly and strongly extended and grow quite stiff, and at other times one or both will shake violently without her being able to check it. Her sight is dim, and for some time she complained of stiffness of the muscles of the face and tongue. These and various other unequivocal evidences of some central lesion of the nervous system, have gone on steadily and latterly rapidly increasing, notwithstanding the most careful treatment in every respect, and the administration of all our most potent remedies.

The medicines certainly seemed to do good for a time, but the benefit was very temporary. I thought Plumbum carbonicum was one of the most useful.

In this instance there can be little doubt that the mother's life was thus compromised for the sake of her offspring, and that if, instead of having had eight, she had had only three children in the thirteen years, she would now be well. Such cases prove the heavy draught upon the spinal cord of the process of utero-gestation and parturition; and it seems to me that they stand in opposition to an axiom of Dr. Marshall Hall, that

involuntary reflex actions are not attended with exhaustion of the spinal cord, and that this organ does not require for itself the refreshment of sleep. In proof of this view, Dr. M. Hall refers to the long flight of certain birds, which he believes to be carried on without any wear and tear of the nervous functions, by their reflex action alone. But are not all the relations of the uterus and other genital organs to the spinal cord of the reflex character, that is independent of volition? Yet, as we see, there is nothing which so exhausts the nervous system.

The whole subject of the relation of the spinal cord to the organs of secretion and involuntary muscular action is one of great difficulty, and we must wait for fresh light from the researches of physiologists. In the mean time, although we occasionally meet with a disheartening case such as the one I have just referred to, yet it is consoling to observe that the large majority of cases of sympathetic spinal irritation, whether those depending upon exhaustion of the spine or of transferred irritation from irregular action, are remarkably under the control of homœopathy. It would be inexcusable to occupy the time of the Society with the narration of cases, in illustration of what is the every-day experience of all homœopathic practitioners, so I shall conclude with one single case in illustration.

A woman, 45 years of age, consulted me on the 11th of February, 1857, and thus stated her case. The catamenia had ceased the previous August, and from that time she had never been free of pain in one side of the head, coming on in paroxysms of great severity. She is also daily subject to pain in the right arm, which, when it comes on, causes contraction of the muscles, and makes the arm quite useless; the muscles of the orbit are also affected, and the eyeball misdirected. There is little appetite, but in other respects she is in good health. I gave her the 3rd dilution of Naja, a dose three times a day for a week. She returned at the expiry of that period and reported that she had not been so free from pain for three months. She could use her hand and arm to cut her meat, which she had not done for that length of time. The medicine was continued, and in another week she reported herself as free

of all pain, except in the back. This pain in the back remained, notwithstanding various medicines, for three months, when, after a course of Sepia, the catamenia reappeared, and she got well—at least, she ceased to come, and I have every reason to presume she was and is well.

The case is curious as illustrating the transference of an irritation of the spinal cord, produced by want of uterine action, to the nerves of the head and the muscles of the arm, its return to the spinal cord, and eventual cure by the restoration of the function.

THE PURE EFFECTS OF SULPHUR.

By Dr. F. Wurmb.*

I.

Victor Arigler, a medical student, 22 years old, of sanguine phlegmatic temperament and robust body, had always enjoyed good health, with the exception of a scabious eruption when 16 years of age. He made but one proving of sulphur. It was however a long and persevering one. He took every morning from the 29th of October 1846, to the 6th of June 1847, as much pure sulphur as would cover the point of a knife, and during all this time he only intermitted the medicine two days, viz. on the 15th and 16th of November.

The first two days of the trial no trace of medicinal action was perceptible. But on the subsequent days the following symptoms presented themselves.

On the 31st October. Feeling of weight in the stomach; three fluid stools.

On the 1st of November. The feeling of weight in the stomach present all day. In the evening great weariness in the lower extremities.

Nov. 2. Frequent eructations of air smelling of sulphuretted hydrogen; in the evening repeated feeling of weight in the stomach.

* From the New Austrian Journal, I. p. 9 (1857).

From the 3rd to the 6th of November. The motions are insufficient and of unusual, remarkable hardness. On the five subsequent days there was complete constipation; the secretion of urine too was scanty.

On the 11th occurred symptoms of threatened catarrh with confusion of head, loss of appetite, weariness and prostration in all the limbs. The following day the catarrhal symptoms were at their height. The next night there occurred three diarrhœic stools with griping in the bowels.

On the 13th the catarrh declined, but the gripings increased; during the day there were three and at night two quite fluid motions. As the diarrhœa returned the following day accompanied by a troublesome tenesmus, on the 15th he took, in place of the sulphur, two Dover's powders. In the course of the day there occurred three more loose stools, but the tenesmus ceased, and the stool that occurred at night was less loose.

On the 10th the diarrhœa ceased, and he felt quite well all this and the next day.

On the 18th, frequent passing of urine. At night he was awakened by the call to pass water. This symptom he can confidently ascribe to the sulphur, as his sleep had never before been disturbed by the same cause.

On awaking in the morning of the 19th, he had to change his linen on account of profuse perspiration smelling of sulphur. During the day frequent call to urinate. The general perspiration occurred, in a diminished degree, during the following day, but the increased flow of urine ceased.

Nov. 21st. Very profuse perspiration in the hands and feet. This local sweat was, during this and the following days, always clammy and only occurred during the day. Arigler believes this to be a medicinal action, as he is only subject to perspiration in the hands in the warm summer months, and never had sweating in the feet before.

Nov. 22nd. The local sweats continue, especially in the feet, so that he must change his stockings, which are wet through.

Nov. 23rd to 29th. The local perspirations appear, in diminished degree, during the first four days, and go off gradually

during the next three days. The stools during the last two days became again very copious.

On the 30th there is headache, the character and duration of which are not indicated; also burning in the eyes with redness of them. The following day the head was again free from pain and the redness of the eyes much diminished.

From the 2nd to the 10th of December the prover was completely exempt from all effects of the sulphur, except an inconsiderable perspiration in the axilla. On the 11th there occurred a new and most persistent symptom, which did not leave him till the termination of the experiment. Every night, *when he got warm in bed, there occurred a very disagreeable itching* on the whole surface of the skin from the hips to the toes. This itching was particularly bad in the hollow of the knees, and could only be removed by strong rubbing, which caused *a very agreeable feeling*. On the parts so rubbed there occurred small pimples, which discharged a fluid from their points, whereupon the itching ceased, but returned the following night. During the day there was no trace of the pimples, but only the small scars on the parts that had been scratched. The prover remarks that he had formerly suffered from a similar itching from wearing flannel drawers, but it was never so bad nor so enduring as this, although now he had not a scrap of flannel on his body.

On the 24th of December an eruption precisely similar to itch occurred in the bend of the elbows and on the wrists. The resemblance was so great that Arigler feared he had got a fresh infection of itch. He endeavoured but in vain to comfort himself with the fact that the eruption did not itch, and that there was no trace of it between the fingers. His mind was only set at rest next day by finding that all the pustules had disappeared.

December 30th. Morning and evening violent cough, with copious mucous expectoration, which recurred regularly during the following six days. The eructation with the odour of sulphur also recurred during the latter part of the trial.

The above proving is as poor in subjective as it is rich in objective symptoms. It is not probable that the former were

absent, but as this was Arigler's first proving he probably overlooked them. It is to be regretted that he did not institute several trials with various doses; with his great susceptibility for the medicine, a rich result was to have been anticipated.

The organs on which the influence of the sulphur was particularly manifested, were the intestinal mucous membrane and the external skin. The following symptoms of Hahnemann's proving of sulphur were corroborated: 250, 261, 568, 569, 710, 711, 848, 849, 850, 863, 871, 880, 887, 940, 946, 947, 953, 955, 1087, 1334, 1403, 1605, 1667, 1736, 1737, 1743, 1960.

II.

Dr. Arneth performed three series of provings with different potencies of sulphur. He commenced with the so-called high dilutions, then he took triturations, and finished with the crude substance. The following are the results he obtained:

First proving—high dilutions.

The 800th dil., of which the prover took on the 11th instant, at 6 P.M., 12 drops shaken up with 1 oz. of distilled water, had no particular effect; whereupon he proceeded to make further trials with the 400th dil., of which he took 10 drops (in the above way) on the 18th, 22nd, 23rd, and 24th October.

No effect followed, except that whilst making the proving he did not derive quite so much refreshment from his sleep as usual; a circumstance which, however, he cannot decidedly ascribe to the action of the sulphur.

On the 27th and 30th October, and again on the 5th and 15th November, he took 5 drops of the 31st dil. mixed with half-an-ounce of distilled water, and the following symptoms were produced.

Periodically recurring but not very severe pains in the temples, followed by acute drawing pain in the temples.

November 1st. Violent pains in the left eye, as if it were rubbed against spiculæ of glass and drawn in towards the pupil. He was obliged to close the eye five or six times involuntarily. This was followed by burning in the eye and flow of tears. ıe attack lasted about two minutes.

November 3rd and 4th. Bleeding from the anus, although the motion was quite easily passed; raw pain in the left commissure of the mouth, which lasted till the 9th.

November 15th. Frequent shoots in the splenic region, and frequently recurring confusion of the head.

On the 22nd, 23rd, 24th, 25th, and 28th November, he took 5 drops of the 13th dil. in half an ounce of aq. des., and noted the following symptoms:

Severe cutting in right eye; the left commissure of the mouth again painful. (On the 22nd.)

A hard stool, followed speedily by one of ordinary consistence, (in his ordinary state he seldom had two evacuations in one day); painful contraction in the last fingers of the right hand. (24th.)

The urine passed before going to bed smelt like chamomile tea. (This symptom occurred frequently during the proving.)

Besides the above symptoms, which were generally very transient, the following occurred persistently while taking the 13th dil. Light sleep, constant call to void urine, frequent urinating with a feeling of warmth in the urethra, painful confusion of head, great excitement after drinking tea, though he is in the habit of doing so.

Second series of provings—triturations.

(*a*) Third trituration (1 to 99). Ten grains dissolved in 1 oz. of aq. des., and taken at night on the 10th, 14th, 17th, 23rd, and 26th January, produced the following:

Sleeplessness, on the 10th at night, lasting for half an hour at a time, without excitement or troublesome thoughts. It was quite simple, as though the sleep had been cut off.

January 11th, at night. On the left forearm, eruption of small bright red pimples, from 10 to 12 in number. They itched much when touched, easily burst, and let out a little thickish fluid.

January 12th. Previous to a good motion, violent cutting extending far up the rectum. In the evening renewed eruption of pimples, as on the preceding night.

During the night of the 14th, frequent waking; sleep not

refreshing, more like half-slumber, disturbed by vivid dreams of the ordinary occupations.

January 15th. Soreness of left commissure of the mouth; violent, tearing, contractive pain in right hand.

January 17th. Frequent urination. Sleep disturbed by vivid, animated dreams of events that had happened long ago.

January 18th and 19th. Frequent urination.

He now discontinued his trials for a whole month, and only resumed them in March. He took the 3rd trit. as above, with this difference, that he swallowed the dry powder in place of the solution. After four doses (6th, 10th, 12th, 17th March) two symptoms were especially troublesome: a peculiar roaring in the ears, and a peculiar illusion of the sense of smell, to wit, he thought he smelt the perfume of a flower, though there was none in the room.

On the 7th March the left commissure of the mouth was again sore, and the next day a raw pain occurred in the anus.

Further trials with the 2nd and 1st trits. caused no medicinal symptoms.

Third series of provings—crude sulphur.

Of this 10 grains were taken on the 25th and 28th, and 20 grains on the 30th April, which had the following effect:

April 26th. Four loose motions; on this and the following day increased flow of water, great appetite, which however could not be freely indulged—a small quantity of food caused troublesome distension.

April 30th. Violent digging pains in a right healthy molar tooth; strong pressure on the [illegible] diminished the pain; cold and heat had no effect on it.

The prover was interrupted [illegible] fever (first, rigor [illegible] then [illegible] thirst, but with gre[illegible] [illegible] beginning o[illegible] lasted for six [illegible] whether the dis[illegible] always had good [illegible] ning of Septemb[illegible]

to have extracted on account of the violence of the pain, was owing to the sulphur I had taken, I am unable to decide."

In Arneth's trials, as proved by the illusions of the smell, the roaring in the ears, the headaches, the disturbed sleep, &c., the action of the sulphur on the brain was manifested by the most persistent and numerous symptoms; it is therefore quite possible that the violent commotions of the circulation, which were never absent at the commencement of the aguish attacks, and which often reached a dangerous height, were partly at least due to the sulphur. Whether the ague itself was owing to the sulphur, I cannot positively determine, on account of the peculiarity presented by the several fits, and because nothing similar is to be found either in Hahnemann's or in our provings of sulphur. Were this not the case, we should be justified in ascribing this ague, just as well as the other symptoms, to the action of the sulphur; for the physiological experiments leave no doubt that it is capable of producing periodically recurring symptoms.

In addition to the cerebral symptoms, the increase of the urinary secretion must be regarded as a constant symptom in Arneth's proving.

There were but feeble indications of its action on the intestinal canal and skin. The following symptoms in Hahnemann's list were corroborated: 76, 77, 78, 240, 333, 453, 601, 602, 765, 871, 872, 896, 905, 947, 948, 980, 1177, 1417, 1418, 1785, 1786, 1787, 1792, 1803.

III.

Dr. Garay proved sulphur on himself and on his daughter.

(*a.*) GARAY'S PROVING ON HIMSELF.

First proving with triturations.

On the 22nd January, at noon, Garay took 10 grains of the [illegible] trit.; soon afterwards he had a loose fœtid stool, [illegible] by annoying, straining, ulcerative pain in the anus on [illegible] sensation for long afterwards as if he should [illegible] slight headache at the left side of the [illegible] the eyebrow, and a quarter of an hour

later a transient slight attack of vertigo. About 11 P.M., on going to bed, rigor in bed, and aching on the right side of the vertex, lasting until he went to sleep; it recurred the next morning on awaking, and lasted an hour.

January 23rd, at noon, 20 grs. of the 6th trit. During all the day tickling in the posterior wall of the pharynx, causing a troublesome tussiculation. At night on making water a violent shoot through the urethra up to above the pubes. The rigor returned at night in bed.

January 24th. Scraping feeling in the throat, which lasted all day, coughing with expectoration of phlegm. At noon, troublesome aching on the left side of the forehead, and sensation of swelling and ulceration on the left side of gums, drawing pain first in the upper teeth of the left side, and then in those of the right side; desire for coffee; rigor not removable by the heat of the fire; the nails are blue, the face pale, the head giddy and heavy. This rigor never lasted long, but it constantly recurred, especially on moving, also after swallowing the saliva, and it was attended with a sensation as if the bones of the upper arm were broken; feeling of coldness, as from a draft of air diagonally across the abdomen above the navel. After drinking coffee, burning of the right cheek and auricle with chilliness of the rest of the body. In the afternoon great sleepiness, from time to time bruised pain in the outside of the left tibia, slight griping in the bowels, a very painful chap in the middle of the upper lip which lasted several days, nervous excitement at night on going to bed, drawing in the teeth of the left upper jaw, the gums of which pain as if ulcerated; troublesome itching of the skin of the whole body, with the exception of the inside of the limbs, which lasted four days.

As no more sulphur symptoms were present on the 29th January, Garay took on that day [illegible] of the 30th trit. Soon afterwards the following s[illegible] appeared. A sudden not violent pain i[illegible] side [illegible] in the left upper [illegible] both arms, and a [illegible]

About 10 P.M. su[illegible] diarrhœa, which cont[illegible]

fæces. After the stool griping in the bowels, which gradually increased in intensity and continued for a long time in the right side of the abdomen; discharge of much inodorous flatus, tiresome itching in the anus, cramp-like pain in the glans penis and in the angle of the left lower jaw, violent squeezing pain first in the left then in the right auricle close to the opening of the meatus.

January 30th and 31st. In the morning tiresome aching in the forehead, first on the left side and then on the right, extending to the mastoid process; frequently recurring shoots in the urethra, which are sometimes limited to a small spot, sometimes extend to the pubes. At noon again occurred the usual shivering as if after exposure to a draught of air, with blueness of the nails and goose-skin, at first on the outside of both arms, then on the back down to the sacrum, and lastly on the abdomen, where it felt as if he was stroked across with something cold. It was lessened by the heat of the fire, increased by movement, and it was accompanied by the following symptoms: weariness, paleness of face, which has a suffering expression, pains in the middle of the upper arms, and of the thighs and legs, as if the bones were broken, and pains shooting through the outside of the feet. All these symptoms, although they occurred at the usual time of taking dinner, did not in the least interfere with the prover's appetite; on the contrary, he ate his food with great relish.

At 3 P.M. violent tearing in the right knee and ankle, boring squeezing pain in the right forearm.

At half-past 11 P.M., while sitting, an acute shoot in the bend of the right and then in that of the left knee, with horripilation on one side of the chest.

February 1st. In the evening very painful shoots along the left shoulder blade, frequently recurring and lasting long.

February 2nd. Immediately after taking 10 grains of the [illegible], rigor.

[illegible] evening, in bed, attacks in the left [illegible]ing pain of such violence as to cause

February 6th. He took at noon 20 grains of the 8th trit. During the day, beyond headache, no symptoms; at night griping in bowels and frequent urination. These symptoms were still present the following morning. Besides these, there appeared on the 7th February the following effects of sulphur: annoying paralytic feeling on the outside of the left leg and left forearm; at noon, violent drawing in the right forearm, along the radius, and in the outside of the right leg. "My hands," says Garay, "had for several days been unusually cold, and I had a sensation in the lips as if they were covered with salt."

Feb. 9th. On going to stool, he had to strain for a long time, and has annoying aching in the small of the back.

February 29th. The desquamation of the skin of the face, which had commenced some days previously, continues, as also the itching all over the body. Roughness of the throat with increased nervous sensation in it, compelling him to hawk frequently. Tickling in the palate, drawing in the left thumb, shooting in the left eye, preventing him from reading for several days; when he attempts to read he gets immediately violent shooting pains through the middle of the pupil deep into the eye; in the evening troublesome feeling of heat in the eye. For some days past there has been a humid eruption on the top of the head like tinea capitis, small grain-like pustules filled with pus, and drying up into honey-like scabs (achor granulatus). On the right ear a painful pimple is to be felt, which disappears in four days; violent itching in the glans penis and the mouth of the urethra.

February 26th. During the day several diarrhœic stools with burning in anus, preceded by gripes; much mucus in the throat.* In the evening great burning in the anus and the urethra, with frequent urgent call to make water, and burning at the mouth of the urethra during micturition. Troublesome sexual desire without actual erection. In bed every place appears too hard for his head, which on account of this disagreeable feeling he must keep moving hither and thither, without succeeding in finding a better position.

* A[illegible]

Second proving with sulphur—insubstance.

On March 3rd, at 10 P.M., he took 2 drachms of flowers of sulphur in a glass of water. Immediately afterwards collection of mucus in the pharynx, of a salt taste, making it necessary for him to expectorate frequently. At night feeling of heat in the whole body, especially in the palms of the hands, continued erections, with vivid, not lascivious dreams, itching in the bend of the right elbow making him scratch; the scratched places exude moisture.

On the 4th, some headache; at night loud rolling in the bowels, followed by a copious, pappy, yellowish-green, very fetid motion.

March 7th. Took half an ounce of flowers of sulphur in water without observing anything.

March 10th. At noon, 1 oz. of sulphur in water. During the day aching in forehead; at night rumbling in the bowels; the following morning a copious, extremely fetid, pappy, yellowish-green stool, followed by a feeling of perfect health.

He now left off his provings for three weeks, and during that time he remained free from all medicinal symptoms.

At the end of the 3rd week, after another dose of sulphur (quantity not given), the following symptoms appeared: troublesome falling asleep of the limbs, produced by a very slight cause, for instance, by pressure. It was caused by the pressure occasioned by sitting, lying, leaning, &c. The fingers, especially those of the left hand, went to sleep when playing the piano. Painful twitching in the direction of the left peroneus longus, lasting several weeks, and making walking difficult. His food which he generally likes very little salted, he now salts very much, and still it tastes to him as if there was no salt in it. Itching over the whole body, recurring every night regularly in bed, and lasting for several weeks.

April 5th. At 10 P.M., an intolerable burning in the whole urethra, as if pepper had been sprinkled on it. A drop of tinct. in water removed this symptom instantaneously.

At night horrible dreams with great palpitation awaking, sometimes rigor, sometimes heat and

April 16th. At noon he took 2 oz. of sulphur in water. This was immediately followed by tickling in the throat, causing him to hawk. Soon afterwards transient aching in right side of forehead. In the evening, jerking, cutting in right eye, spreading to the temple; it lasts several hours, and can be excited anew by touching the right side of the point of the nose. In bed, slight shivering, followed by general heat, and finally profuse perspiration, smelling distinctly of sulphur.

April 17th. Early in the morning four soft stools. When at stool increased heat of body and profuse flow of saliva into the mouth; after stool much thirst; before, during and after the motion, inclination to vomit, burning in the anus.

Besides the above, the following symptoms occurred on the morning of April 17th. Burning in the left ala nasi, lasting for several minutes, and frequently recurring. Occasional shoots in the urethra. Dry feeling and tensive pain in the left side of the palate, gradually extending to the right side, and lasting two days; after this the feeling of health was completely restored.

From his experiments, Garay draws the following corrollaries:

1st. The symptoms of sulphur occur chiefly on the left side.

2nd. Smaller doses of the medicine, *i.e.*, triturations, act more energetically than the larger, *i.e.*, untriturated sulphur. The latter developes principally symptoms indicative of the efforts of theorganism to get rid of the medicine. The medicinal symptoms which during [illegible] only appeared a considerable time [illegible] sulphur. Garay is inclined to att[illegible] in the body, notw[illegible]

(*b.*) Dr. G[illegible]

The young lady [illegible] time 5, and after [illegible] After each dose sh[illegible] region that he was oblig[illegible]

Dr. Garay's great su[illegible] was not remarkable in this [illegible] the medicine were capable o[illegible]

symptoms, but also in the occurrence of so many symptoms immediately after taking the sulphur. The rare persistency, and the periodicity of many of the medicinal symptoms, deserve particular notice.

The symptoms of the above proving may be classed in six groups: to the first belong those which (as, for instance, the febrile phenomena) at the commencement of the trial point to implication of the vascular system; to the second group belong the cutaneous symptoms; to the third those symptoms that indicate an affection of the lower end of the intestinal canal; the symptoms of the fourth group are those which refer to an affection of the urinary organs. The few but very persistent symptoms which shew the action on the mucous membrane of the throat constitute the fifth group. The various kinds of pains, occurring now here, now there, *e.g.*, in the forehead, eyes, scapulæ, limbs, &c., form the sixth group. The brain, the organs of the senses, the thoracic viscera showed no signs of being affected in Garay's experiments. In spite of the enormous doses he took, he could not succeed in deranging his stomach, and it is certainly not his own fault that he did not become really ill; he certainly spared no trouble to become so. His symptoms corroborate the following ones of Hahnemann's proving: 83, 118, 121, 248, 352, 416, 439, 543, 606, 824, 859, 868, 901, 906, 910, 915, 916, 917, 925, 928, 941, 953, 978, 900, 986, 987, 988, 989, 990, 993, 1013, 1016, 1019, 1350, 1391, 1505, 1665, 1798, 1862, 1873, 1875, 1901, 1904.

IV.

F. Gottwald, surgeon, 37 years of age, of melancholy temperament, healthy up to his 24th year, when he had an attack of articular gout (arthritis acuta vaga). After using the sulphur baths of Baden for three weeks, the gouty symptoms disappeared entirely, and since then they have recurred but seldom, only in a very mild form.

a drachm of the 1st dec. trit. Soon
uth and throat, aching in left eye.
harge of flatus, good appetite,

toes. Pains in the joints as on the previous day. At night, painful aching in the small of the back; restless sleep.

June 14th. After taking another scruple of the 3rd trit., the following symptoms appeared: dryness in the throat; frequent sneezing and coughing. After dinner, shivering; weariness. In the evening, griping in the bowels and frequent fluid stools; involuntary evacuation of the stool when sneezing or laughing. At night, tenesmus and swelling of the piles, which had not occured for nine years previously.

Gottwald's proving of sulphur, although it only lasted eight days, and although only four doses of the medicine were taken, is in many respects interesting, but chiefly on this account, that many of the symptoms have so great a resemblance to those observed by Dr. Garay. The influence of the sulphur shewed itself in both provers in the same organs, in the same manner, in the same order of development, &c., only in Gottwald the symptoms were not so fully developed, and he generally experienced only slight indications, whereas in Garay occasionally pretty smart medicinal symptoms were developed. But it could not be otherwise, for Gottwald avoided what Garay sought; the latter wished to become regularly ill from sulphur, the former did not. In Gottwald's proving the following symptoms of Hahnemann were repeated: 41, 202, 214, 215, 226, 280, 283, 326, 483, 520, 521, 606, 628, 642, 643, 829, 863, 869, 871, 877, 925, 928, 934, 935, 1081, 1105, 1202, 1389, 1535, 1568, 1641, 1768, 1798.

V.

Dr. Franz Hausmann, of Pesth, proved several triturations of sulphur, which he prepared with large beautiful crystals of sulphur from Girgenti in Sicily, and an equal weight of carefully purified sugar of milk. Of a 16th trituration made in this way, Hausmann took on the 2nd April, at 7 A.M., 68 grains. In an hour he felt a drawing in the right forearm, near the elbow, which went like a stream of air or a breath over the part,

ing of paralysis. At 10 A.M. he had a second

rance, in addition to his usual early motion.

he 5th trit., taken at half-past 7 A.M., on

rved the following symptoms: in a

quarter of an hour drawing as on the previous day, but this time in the tibia, accompanied by a sensation in the small of the back as if a cool breath passed over it from without (although he was carefully wrapt up in his dressing gown).

At 8 P.M., a similar drawing near the right wrist and little finger, and back of the hand.

At 10 A.M. he took 26 grains of the 14th trit. About 7 P.M. attacks of aching on the right side posteriorly of the lower part of the thorax, which proceeded from the inside, penetrating deeply and lasting a considerable time. This recurred periodically for three days, and took place in every different position and posture of the body, when walking or when at rest.

On the 6th April he took before breakfast—

at half-past	8	A.M.	37 grains of the	13th	trit.
at half-past	9	„	35 „	12th	„
at	10	„	25 „	11th	„
at	12	„	28 „	10th	„

Thereupon occurred great sleepiness after dinner, and after having slept, confusion of the head, lasting all the afternoon. On walking in the open air the confusion diminished. At 5 P.M. shooting above the right patella when walking.

On the 7th April he took—

36 grains of the	9th	trit.	at	6	A.M.
34 „	8th	„	....	7	„
26 „	7th	„	½-past	8	„
34 „	6th	„	½-past	8	P.M.

At 5 P.M. fluttering before the left ear.

April 8th. At 5½ A.M., soon after getting up, diarrhœa, yet the fæces are formed, mixed [illegible] mucous, and full of holes. After the [illegible] bowels.

He took on th[illegible] of the 6rd, and at 9 A.M. 26 [illegible] the evening he had [illegible] the morning.

He proceeded in [illegible] (April 9th), when he [illegible] and at 6 P.M. 35 grains [illegible] in the morning, and ag[illegible]

yesterday. At 3 P.M. straining at stool without evacuation, feeling of dryness in the rectum.

April 10th. After 17 grains of the 1st trit., on rising in the morning a diarrhœic stool as on the previous days; a similar one at 11 A.M. The fæces smelt strongly of rotten eggs, and were lighter coloured than usual. After the evacuation violent tenesmus, a contraction with flatus pressing forwards in the bowels. This flatus was felt like a great sausage lying from left to right above the navel. About 2 P.M. discharge of much flatus smelling of rotten eggs, and soon afterwards a liquid stool of the same fetid odour. About 5 P.M. great confusion of the head, worse when walking in the open air. Later, a pain of contraction and pressing in the abdomen, especially the hypochondria and umbilical regions; in the hypogastrium a feeling of paralysis; involuntary discharge, like a diarrhœa of thin fæces, with great anxiety, followed by an outbreak of perspiration all over the body, especially on the forehead, which relieved the confusion of head. Thereafter only a transient feeling of pressure in the forehead. On rising from the stooping position, vertigo and weight in the head. On awaking from sleep before midnight, pressure in the left frontal protuberance, and rumbling as of great air bubbles in the hypochondria.

April 11th. At 8 A.M., evacuation of a scanty, thin stool, and after dinner, about 2 P.M., an unsatisfactory but formed motion.

April 12th. At 8 A.M., a motion, at first hard but at last loose, which causes on its passage through the rectum a violent cutting pain. After dinner a motion.

April 13th. Motion of the bowels as yesterday.

April 14th. He was wakened up in the morning by a quantity of mucus accumulating in his throat, and requiring to be hawked up. Stoppage of the right nostril. About noon, shining red swelling of the point of the nose, whereby the anterior angle of the left nostril felt thick, hard, and painful to the touch. A herpes cincinnatus on the right middle finger [illegible]n, red and shining. The different ducts of [illegible]baceous glands filled with the product [illegible]re plainly, whilst the whitish, scaly [illegible]d off and removed.

April 29th. On the volar surface of the point of the right thumb, at the side next the index, there appears in the morning a trace of redness. The dorsal part of the thumb bearing the nail is painful to the touch as if gathering. On the following day the redness is more limited, and in its centre appears a whitish spot, which on the 1st of May assumes a yellow colour, and increases in size. A small purulent deposit surrounded by a pale red areola has formed, which lies imbedded in the skin, and above which the epidermis is still smoothly and uninterruptedly extended.

May 2nd and 3rd. The purulent deposit is elevated into a small swelling, which is covered by a brownish coloured epidermis.

May 4th. During the night the swelling increased to thrice the former size. That which increased it so much was not however pus, but a transparent fluid which had exuded beneath the pus and raised up the latter. The quantity of this fluid increased during the day, during which the pus gradually mingled with it. The red areola which had surrounded the swelling as ng as there was only pus in it, almost disappeared at first n the clear fluid collected among the pus; in the course of day, however, a redness appeared at the border of the tion, which, gradually becoming more intense and ex- r further, at length died away at an undefined limit. ed with it there was in the affected finger and in the and a throbbing pain, which was aggravated by the d gradually went off in a burning smarting.

The tension and pain are mitigated; about noon burst and emptied its contents. The collection of ded the greater portion of the volar surface of e thumb where the nail is attached. On the nded almost to the nail, but the bed of the nail equently it was not at all a case of the thumb was quite free from

usmann's proving were the
. He has corroborated
Materia Medica: 77.

78, 343, 125, 351, 352, 353, 354, 382, 523, 829, 830, 791, 824, 860, 867, 871, 874, 905, 1200, 1212, 1256, 1358, 1447, 1515, 1657, 1760, 1905.

Hausmann shewed great susceptibility for the action of sulphur, and the greatest desire to produce a real sulphur-disease; he, however, wished to develope it too quickly, and hence in his zeal he took the medicine in doses too rapidly repeated. Had he taken the sulphur less frequently, and allowed each dose sufficient time to act, he would have obtained a rich array of symptoms.

VI.

Dr. Wenzel Huber proved sulphur on himself, on his wife, and on a man 47 years of age.

(*a.*) HUBER'S SULPHUR PROVING ON HIMSELF.

*First series of trials—triturations.**

The proving was commenced [illegible] the 27th of March 1846, with the 6th trit., of which he [illegible] morning for six successive days 10 grains, without [illegible] slightest effect.

From April 2nd to the 7th, [illegible] 10 grains of the 5th trit.

April 5th. [illegible] which lasted th[illegible] Swallowing was [illegible] lasted two days.

From April 7th [illegible]

April 8th. Soon [illegible] the small of the ba[illegible] all [illegible] many vivid dreams.

April 9th. In the mo[illegible] of weariness while walking.

10th. Hoarseness; sensi[illegible] tis; tightness of chest.

* The triturations were all prepa[illegible] means of a machine with a pressure of [illegible]

11th. Hoarseness; tightness of chest, disgust and inclination to vomit all day long; two fluid stools.

12th. Besides the above, there were: ill-humour; pain in back, increased by every motion, and lasting until night.

From 13th to 18th. He daily took 10 grains of the 4th trit.

13th. Soon after taking it, disgust and retching in the throat, lasting some hours.

14th and 15th. Soon after taking it, slight gripes about the navel, lasting but a short time.

16th. All day deep in the centre of the thorax a sore place about the size of a crown; pain increased by movement and inspiration, at night it went off.

17th. In the morning the right nipple was swollen and painful to the touch, or when he breathed deeply.

18th. Swelling and sensitiveness of the nipple as yesterday; feeling of roughness in throat, and inclination to cough during the whole day.

From 19th to 24th April. Daily 10 grains of the 1st trit.

19th. The nipple sensitive; in the morning slight aching in forehead.

During the following days, with the exception of the not very painful aching in the forehead (which occurred every morning until the 28th), there occurred no more symptoms, although he continued to take the medicine in the dose indicated until the 30th of April.

October 16th. He again renewed his provings, and this [illegible]mmenced with 50 grains of the 6th trit.

[illegible]alf-an-hour, palpitation of heart, which lasted two [illegible]nd was attended by anxiety as though he were going

[illegible] took 100 grains of the 6th trit. An hour after- [illegible] pain in forehead and confusion of head, as if [illegible] much alcoholic drink, lasting until noon.— [illegible]nalt[illegible]l, but afterwards unusual fulness [illegible]ing in the open air.

[illegible] dose; the same symptoms,

After breakfast: feeling of fulness of the stomach; pressure in the region of the stomach; empty eructation and sensation as if he were about to have heartburn. In two hours perfectly well.

20th. After the same dose no alteration.

21st. Without medicine or symptoms.

22nd. After a repetition of the above dose no symptoms, except a small pimple on the upper lip, painful to touch.

23rd. Same dose as yesterday. Soon after taking it aching pain in forehead above eyebrows. An hour later, burning aching pain in occiput; which feels as if its seat were beneath the bone; it lasted till the afternoon, and then gradually went off. The pimple on the upper lip disappeared in the course of the day.

24th. At 6 A.M., after waking, aching pain in forehead, going off after getting up and washing.

To-day he took 100 grs. of the 4th trit. In half an hour, feeling of heat in the occiput, and dull aching pain over the whole head, lasting nearly three hours, and then gradually going off. After dinner, confusion of the head, which went off by walking in the open air. On coming into the heated room, hot feeling in the occiput, which only lasted a short time. At night from 12 to 3 o'clock no sleep, but no other symptoms.

25th. The same dose as yesterday. On awaking in the morning, great confusion of head, going off after getting up. The feeling of heat in the occiput and the headache again occurred, but were less troublesome than yesterday. In the evening heartburn; after midnight restless sleep.

26th. Without medicine. In the course of the day the right nostril was sensitive to the touch and somewhat reddened. A good night.

27th. He [illegible] During the day frequent attacks [illegible] pain there, which always [illegible] but always returned on co[illegible] right ala nasi and especia[illegible] painful to the touch; [illegible] violent pain. At [illegible]

by about 20 drops of red blood. From 10 A.M. until evening constant feeling of fulness in the hypogastrium. At 2 P.M. contrary to custom, a second evacuation of thin fæces, again followed by a few drops of blood. During the whole day, especially when walking, a feeling of tension in the metatarsal bone of the left great toe and in the toe itself.

28th. 100 grains of the 4th trit. The inflammation of the nose continues. During the day frequent sudden vertigo, especially when walking near a declivity. The accustomed beer at night makes the vertigo worse. The pain in the dorsum of the left foot was present all day long and was felt also at night. Anxious dreams at night.

29th. Without medicine. Continuance of the inflammation of the nose. Sudden attacks of hot feeling and aching pain in occiput. After dinner when walking, great weariness and aching in stomach; weight and fulness in hypogastrium with the feeling as if something heavy pressed on the bladder. Pain in foot as yesterday, but less in degree.

30th. 100 grains of the 3rd trit. In the morning, after a good motion, several drops of blood. At noon a rather liquid stool without blood, but preceded by slight griping. Sensation of fulness in hypogastrium, and pressure on the bladder. Slight confusion of the head and some vertigo. Nose not so red and sensitive. Pain in foot gone.

31st. Without medicine. Nose scarcely at all tender to touch, and covered with bran-like scales on the parts that had been inflamed.

1st November. 100 grains of the 3rd trit. Fulness in hypogastrium; pressure on the bladder; frequent passage of small quantities of urine as clear as water. In the forenoon two loose stools; in the afternoon after a glass of wine, a stupefied state.

2nd. Same dose as yesterday. On awaking in the morning pressive pain in the forehead and occiput; feeling of fulness in hypogastrium; frequent call to make water, with feeling of the sphincter muscles of the bladder on doing

the morning regular stool. After

luncheon, (11 o'clock,) griping round the navel, followed by a very soft motion. Fulness in hypogastrium; pressure on the bladder, as if it were too full, without call to make water. About noon contractive pains below the navel, as if diarrhœa were coming on, recurring three times at half-hour intervals. At the same time pressure on the bladder, as if it were forced upon the groins, also a feeling of straining at the sphincter muscle, as in retention of urine. About 4 p. m. after a glass of beer, heat of head, pressive pain on the left eye, feeling of dryness in left nostril, and sensitiveness of the mucous membrane on inspiring the air of the room; the latter sensation went off almost entirely in the open air. In the evening perfectly well.

4th. Without medicine, pressive headache over the eyebrows almost all day, more or less severe and continued. Itching, provoking scratching, in the scrotum and the thighs, and sweat on those parts; loose stool.

5th. 100 grs. of the 2nd trit. After taking this, eructations with odour of rotten eggs; all day long much perspiration and itching between thighs and scrotum; two soft stools.

6th. Without medicine. Itching and perspiration in the scrotum. No other symptom.

7th. After the above dose, confusion of head, lasting more or less all day long; tensive pain in the left metatarsus and the left great toe, especially on turning or moving it. After dinner pressure in stomach lasting three hours. In the evening sudden very painful tearing in the left upper eyelid.

8th. The tensive pain in the left metatarsus and great toe continues; at the border of the nail of the left thumb there occurs an extensive inflammation after an insignificant injury.

9th. The tensive pain in foot continues. The inflammation just adverted to spreads over the whole of the first joint of the thumb; pus appears at the wounded part, which was artificially evacuated in the evening.

10th. Without medicine. New formation of pus at the root of the nail; the first joint [illegible] and very painful; the pain [illegible] An insignificant abrasion of the [illegible] produces a liv[illegible]

(nothing similar had ever before happened to him). At the lower border of the left lower jaw there occurs in the morning a painful pimple the size of a pea on the skin, which gradually rises above the skin and takes on a blue colour.

11th and 12th. Without medicine. On the 11th a furunculus appears at the angle of the right lower jaw, similar to that on the left side; the onychia continues, and suppuration on the abraded skin.

13th. Repetition of the above dose. The furunculi become larger, but are quite painless; continuance of the onychia and suppuration of the abraded skin. The same symptoms were present on the 14th and 15th of November, on which days 100 grains of the 2nd trit. were again taken.

16th. Without medicine. The furunculi attained the size of a hazel nut, but are not painful, and but little reddened. On the left hand betwixt thumb and index an itching pimple, the size of a poppy seed, seated on a small areola, at the apex of which, in the course of the day, a small vesicle filled with a clear fluid formed, which when scratched off burned like fire. During the night violent itching of the foreskin, making him scratch, and followed by a voluptuous sensation.

17th. 100 grains of the 2nd trit. The itching pimple is gone; the other symptoms as yesterday.

18th and 19th. Without medicine. The furuncles are growing smaller; the onychia and the abraded skin are healed; the itching on the prepuce moderated.

20th. 100 grains of the 2nd trit. Everything as yesterday.

21st. The same dose. In the morning he observed on the back of the right index on its third joint an inflamed pimple the size of a hemp seed, which by evening had on its apex a vesicle filled with an opaque fluid. During the night this fluid assumed the appearance of pus.

22nd, 23rd, and 24th. Without medicine. The pus in the vesicle increased gradually more and more; the base of the [illegible] became larger and more painful, just like a boil. On [illegible] was discharged, whereupon the pain abated, [illegible] dually, but very slowly, for on the 30th [illegible] boils on the lower jaw are almost

25th. 100 grains of the 1st trit. Soon after taking it aching pain in forehead, especially above the right eye, lasting till noon. Feeling of roughness in the throat and buccal cavity; call to stool without result, it was only at noon that he had an unsatisfactory stool. In the afternoon pressure on the chest and some cough, caused by the roughness of the throat.

26th. The dose repeated. During the whole day confusion of the head; in the room feeling of heat in head; sensation of roughness in throat and buccal cavity; asthmatic feeling in the chest. Otherwise as yesterday.

27th. The dose repeated. Confusion of head; heat of head and aching pain in occiput; feeling of roughness in mouth and throat; feeling of fulness in abdomen and stomach, as if they were too full; tongue rather white furred; taste insipid and bitter, and yet good appetite for dinner. Asthmatic feeling in the chest. At night little sleep and sour smelling perspiration.

28th. Without medicine. Besides the symptoms of yesterday there occurred frequently sudden tearing in the fingers of both hands and in the dorsa of both feet. At night many vivid dreams; pressive pain in occiput and sour smelling perspiration.

29th. The dose repeated. Feeling of roughness in mouth and throat; oppression of chest; some cough. Four hours after taking the medicine griping beneath the navel, fulness of abdomen, pressure on the bladder; normal stool. On every movement pain in the ankles.

30th. No more medicine taken. In the morning the ankles were so painful he could [illegible] However he persisted in using his feet [illegible] he walked and finally di[illegible]

The confu[illegible] occiput, the feeling of fulne[illegible] pressure on the bl[illegible] the symptoms that h[illegible] on the scrotum [illegible]

Second series of t[illegible]

On the 8th of Jan. [illegible]

9th. Same dose as yesterday. Vertigo, worst soon after taking it, (probably the effect of the alcohol,) but lasting in a slight degree all day. In the morning on waking, heat in occiput, which went off after rising from bed. All night many disagreeable dreams.

10th. 100 drops. In the morning heat and pain in the occiput; the usual stool delayed, hard and insufficient; full feeling in the hypogastrium and pressure on the rectum and bladder. He felt as if the urine was retained by contraction of the sphincter muscle of the bladder, although it seemed as if it must come away in consequence of the pressure on the bladder, and yet only a short time previously he had emptied his bladder. The same sensation in the anus. At night troublesome dreams.

11th. In the morning and again at 8 P.M. 200 drops. In the morning weight and hot feeling in the occiput; pressive pain all over the head, especially on the occiput, aggravated by external pressure. The pressure on the bladder and anus continues all day long, although he had a normal stool at noon. Rough feeling and scraping in the throat; feeling of fulness in the stomach, and yet good appetite for dinner. At 9 P.M. in the undecayed teeth of the left lower jaw, aching pains which last an hour. The sleep at night is disturbed by vivid dreams.

12th. 200 drops at 5 A.M., and again at 8 P.M. The same symptoms as yesterday.

13th and 14th. Without medicine. On awaking in the morning continued heat and aching pain in occiput. The feeling of fulness in stomach, pressure on the bladder and anus, hoarseness and roughness in throat, have almost disappeared.

15th. In the evening 400 drops taken in warm sugar and water. Immediately, heat of head, confusion of head, (probably the effects of the alcohol): feeling of roughness in the throat, hoarseness, irritation causing cough, which results in the expectoration of small round pieces of blue mucus about the size of a pea; feeling of fulness in the stomach; sour eructation like heartburn, irritated cross temper. At night lascivious dreams.

16th. At 7 A.M. 200 drops, and at 8 A.M. 200 drops. Immediately afterwards aching pain in the forehead, heat in the

occiput, slight vertigo; empty eructations; roughness in throat; constriction of chest; feeling of fulness in stomach, loss of appetite. After dinner eructation of inodorous wind; in the evening after drinking beer, passes a great quantity of urine. A good night.

17th. Morning and evening 400 drops with warm sugar and water. In the morning the usual headache and two diarrhœic stools; in other respects the same symptoms as yesterday.

The medicine was discontinued. During the following days the cough, the roughness of the throat, the headache, the feeling of fulness of the stomach, &c. disappeared gradually. But in their place there occurred diarrhœa, with pretty severe gripings beneath the navel, accompanied by burning and tenesmus in the anus. The diarrhœa lasted four days, and there were from four to six motions daily, until on the fifth day there was only one loose motion. The appetite and general feelings remained good all the time.

Third series of Trials—External application of the Tincture of Sulphur.

23rd January. Half an ounce of sulphur tincture was rubbed into the skin of the thighs. Immediately afterwards, cold feeling followed by burning in the parts rubbed.

24th. At 7 A.M. 1 oz. of the tincture was rubbed into the thighs and arms. The cold feeling and subsequent burning were less than yesterday. Soon after performing his ablutions, chilliness which lasted till noon. Whilst walking in the open air, he felt very wearied, had eructations and nausea, with feeling of weakness. At 8 P.M. the same quantity was rubbed in. Soon afterwards, vertigo as if from intoxication; transient nausea; feeling of fulness in stomach and empty eructation. After an hour, on carefully examining the parts where the tincture had been rubbed in, he found several discrete not itching pimples the size of poppy seeds, and of the same color as the skin. The night was good.

25th. In the morning the number of the pimples had increased; some of them which had been present yesterday, had at their apices a small vesicle filled with a limpid fluid, and

were surrounded by a narrow red areola. On scratching off the heads of some of them in the morning, the epidermis desquamated, there came away a large quantity of fine scales. About 8 P.M. he rubbed in another ounce and a half of the tincture. Soon afterwards, stupified feeling; he fell asleep soon: he had a good night.

26th. In the morning slight frontal headache. The skin on the thighs, especially on their inner surface and in the neighbourhood of the knee, rough like goose-skin. Many pimples were the same colour as the skin, others had the above described vesicles. On scratching many very fine scales fell off, especially in the region of the elbows. In the evening he again rubbed in one and a half oz. of the tincture.

27th. In the morning aching in forehead. About 9 A.M. when walking in the open air, griping in the bowels, especially about the navel, which lasted with greater or less intensity all day long, and only went off about 9 P.M. A hard motion in the course of the day. Several pimples attain the size of a millet seed and remain the color of the skin; the desquamation continues.

"With the rubbing in on the 26th of January," says Huber, "I closed my trials of sulphur, and I have only to remark, that up to this time (3rd Feb.) the roughness of the skin, the eruption and desquamation in the region of the elbows continue. This eruption does not itch, and even when I scratch off the heads of the vesicles designedly no burning follows. Although I often washed the whole body, still I always observed in the morning that my perspiration smelt of sulphur strongly. Otherwise I feel quite well."

(*b*) HUBER'S TRIAL OF SULPHUR ON HIS WIFE.

Mrs. Huber took the sulphur trituration, in the same quantity and on the same days as her husband in his first series of trials.

The 4th and 5th trit. caused no alteration in her sensations.

After taking the 4th trit., and whilst using the 3rd trit., her nights were disturbed by anxious dreams.

On the 16th April the catamenia came on at the proper time; they were so profuse on the following day that she had to keep

her bed; no pain however attended them. The blood was black, clotted, and as sticky as glue. On the 18th the discharge was still profuse, but went off by the 22nd. (In her normal state the catamenia usually last three days and are scanty.)

Whilst taking the 2nd trit., the anxious dreams returned, they were so vivid, that on two occasions, believing she sat on the chamber utensil, she passed her water in bed.

23rd. Contractive pains in the region of the uterus towards the pudenda, resembling the sensation preceding the catamenial flux; they lasted from morning till night.

24th. There appeared on the right palm some not elevated, red burning spots, the size of a shilling, which went off after a few hours. Continued bearing down in the genitals.

25th. Soon after taking the medicine, the red marks came again, and remained visible until evening.

26th. Violent contractive pain in the belly, especially in the uterine region. In the afternoon the catamenia came on and the pains were relieved. They lasted this time as usual three days; the flow of blood was less, and its quality as usual. She however felt much pulled down, was very irritable, and all exercise tired her more than usual.

From the 27th of April till now (May 10th), the red marks in the palm often appeared, but only remained for a short time. In other respects she was and remained quite well.

(*c*) HUBER'S TRIALS ON A MAN AGED 47.

This prover was a schoolmaster, of robust frame and stout. He had in his youth had the itch, which had been cured by sulphur externally and internally. In later years he had been affected with chronic cough, which left him after a time on taking dulcamara tea. His diet is simple, he drinks neither coffee nor other exciting drinks, only a glass of beer in the evening.

He began the proving on the 15th October, 1846, with 20 drops of the tincture of sulphur, which quantity he took daily until the 23rd October inclusive; on the 24th he took 30 *drops.*

16th October. No symptoms.

17th. Loosish evacuation.

18th. Pressive headache, especially in the forehead, going off in the course of the day.

19th. In the evening, dull pain in the whole head, which lasted till late at night.

20th. Two hours after taking the medicine dull pain in the root of the tongue, which increased towards evening and obstructed speech; it looked somewhat red and swollen.

21st. In the morning he felt quite well, but in the evening the pain in the tongue returned, and that more severely than yesterday. The night's rest was disturbed by many vivid dreams.

22nd. During the day he felt perfectly well. In the evening however the pain in the tongue again came on severely. He cannot describe this pain: the tongue feels much swollen, inflamed, and as if it were strongly pressed upon; on pressing the finger on the left side beneath the tongue backwards, he felt a very painful hard pimple of the size of a pea; at night, many vivid dreams.

23rd. All as yesterday.

24th. Pressive pain in frontal region; in the afternoon a violent pain occurred in the tongue; it was swollen, and the speech in consequence difficult. The pain of the tongue lasted until late at night.

From the 25th to the 30th, he was forced to leave off taking the sulphur on account of the pain in the tongue; during this time the pain, swelling and pimple disappeared.

31st. He took 30 drops. He felt quite well.

1st Nov. Thirty drops. Slight feeling of the pain of the tongue. At night many dreams.

2nd and 3rd. Each day 30 drops. Same pain in the tongue, otherwise he feels quite well.

From the 4th to the 7th, on which days the above dose was repeated, the pain and swelling of the tongue increased so much, that he could not be persuaded to continue the proving.

In three days the tongue was again quite normal.

In this prover the tongue seems to have been the sole focus for the action of the sulphur. Although the same symptom

was not observed by the other provers, and is not to be found in the *Materia Medica pura*, still we cannot regard it as accidental, seeing that the antidotal relation of sulphur to mercury, which as is well known causes similar symptoms in the tongue, is corroborated by many observations, and the antidote must indubitably obey the law of similarity.

On Huber it was especially the head, the mucous membrane of the intestinal canal, and the external skin, on which the sulphur exerted its influence. By his proving, which must be reckoned one of the best, several new and important symptoms have been gained, and the following of Hahnemann's list corroborated: 41, 76, 100, 120, 121, 131, 151, 190, 438, 512, 525, 532, 533, 534, 573, 628, 633, 651, 652, 653, 654, 659, 664, 713, 785, 858, 869, 871, 890, 916, 920, 951, 953, 965, 981, 1038, 1104, 1159, 1234, 1267, 1406, 1415, 1443, 1446, 1506, 1664, 1684, 1690, 1719, 1752, 1875, 1879, 1956, 1993.

(*To be continued.*)

ON SQUINTING AND STAMMERING,

By Dr. Hirsch, of Prague.

(*From the Neue Zeitschrift für Homöopathische Klinik, vol.* II. *p.* 5.)

Certain abnormal conditions of the muscles whereby their movements are perverted in a peculiar manner, may be arranged in that tolerably large category of diseases for which as yet pathological anatomy can show no structural proximate cause. When we contemplate chorea in its full development, we can perceive numerous involuntary muscular movements in parts that ought to be under the influence of the will, in consequence of a perversion of the nervous influence. This irregular muscular action, which we observe in the above disease, and many other forms of tonic and clonic spasms, not unfrequently takes place in a much narrower circle, inasmuch as it may affect, exclusively, a single muscle or a limited number of contiguous parts of muscles, and is thus able to produce

striking objective symptoms. At the commencement, this over-action of one or more fasciculi of muscular fibres is not constant, and often shorter or longer intervals of quite normal action are observed. But as the evil increases the free intervals become shorter and shorter, till at last the morbid contraction becomes permanent.

In my practice I have had frequent opportunities of observing cases of this kind, and I rejoice to be able to pronounce my conviction, that in all such cases, when the disorder has not lasted too long, or the muscles been injured by unsuitable allopathic treatment, the action of the specific medicines will be found confirmed in the most unequivocal manner.

I place, first, the cases of squinting in children. They occurred usually in young children from 2 to 7 years old, and had mostly lasted from a few days to, at most, a few months before treatment was begun. From a great number of such cases I select the three following.

Clemens H—, æt. 4, the son of a war commissary; of a blooming complexion, and always cheerful and healthy with the exception of slight itching at the anus, began to squint frequently a few days before. This disagreeable affection increased from day to day, and in another week I was requested to treat it. I found the little boy quite disfigured by a squint of both eyes, but comforted the mother with the hope of speedy relief, and having ordered the diet to be changed to one consisting of less farinaceous food, I gave Spigelia 3, in globules, a dose three times a day. In four or five days there was considerable improvement, and in fourteen days the squint was completely and permanently removed.

Caroline W—, æt. 8, had for some weeks shown a considerable disposition to squint with the left eye, on account of which, they had tied up the right eye for the purpose of compelling the use of the left eye. After fourteen days of this treatment no improvement was visible, and I was called in. The patient was pale and sickly looking, with blue circles round the eyes; complained often of colicky pains, and a frequent desire to urine, which was of a peculiar whey-like appearance; she had a continual discharge of thin mucus from the nose, and a con-

stant picking of the nose, and hawking of phlegm from the throat, with rattling in the chest; the stools were thin and pappy. On account of these symptoms I chose Cina, of which the little girl got a dose in the first dilution night and morning. Already, in eight days the squinting and several other symptoms had given way: a dose of Sulphur 15, was now given, and in three days Cina was given again, as above, for a week. After this, the cure was complete.

Mathilde J—, æt. 4, had for three days complained of headache, and at times lay down on the sofa, but, nevertheless, the appetite and motion of the bowels remained pretty healthy. On the fourth day when called to see her I found her feverish; the head hot; pulse 100; tongue furred; bad smell of the mouth; no appetite; urine pale, mouldy, and sour-smelling; the child desired to remain lying down, and was always drowsy. I considered the illness a catarrho-febrile disorder of the stomach, and gave Sepia 9, every two hours. Next day she was a good deal better in all respects, though the symptoms continued, and in addition a squint was observed. The parents then told me that for about a year she had been observed to squint badly on many occasions. When the acute symptoms had got better under the Sepia in two days more, there remained an inclination to constipation of long standing, and itching of the skin at night when warm. For this, three doses of Sulphur 12, were given at three days interval, with obvious improvement. Then Cina 1 was given night and morning for fourteen days: after which, the squinting was notably diminished. Then Sulphur 12 was interposed, and a few days after Cina was given again, as above, for fourteen days. The patient was then well, and remained so permanently.

It is a remarkable circumstance that in almost all the cases of squinting, without fever, that I have observed, verminous affections were in the background, and also it was worm medicines, particularly the Cina and Spigelia that were the curative agents, though we do not find squinting among the symptoms of those medicines in the Materia Medica. Nevertheless, we find in *Spigelia* "the eyes move involuntarily right and left from irregular movements of the muscles, which draw

the ball outwards and inwards." This is a morbid picture which shows distinctly the peculiar relation of this medicine to the motor nerves of the muscles of the eyes, and that it causes a loss of voluntary power over those muscles. In *Cina* we find only a few indications of involuntary action of muscles; we have for example, "palpitation of the muscles of the eyebrows—a kind of convulsion:" also, "the upper eyelids were so weak that they could scarcely open." But nothing is said of any affection of the oculo-motorius, while, nevertheless, it is a fact that in worm cases the squinting that was present more or less with other symptoms, was quite removed by the Cina.

Stammering. It is my firm conviction that this morbid affection, when not depending on organic defect, is always curable at the commencement. Although I have only seen two such cases in my practice, yet from the speedy cure that took place in these, and from their utility in similar muscular affections, I think we may safely reckon on the favourable action of specific medicines in stammering. The first of these cases was a boy of 5 years old, in whom the father had remarked that for about fourteen days, as soon as he began to speak, he had to repeat the first syllable of the first word three or four times, but when he got over this difficulty he could speak pretty fluently. When he stopped for awhile, and began to speak again, the same difficulty presented itself. In this patient there was a strong disposition to worms, and here the Spigelia was successful in removing the evil in a few days. It was given in the 6th dilution, a dose night and morning.

The other case of stammering occurred in a girl of six years old, of lymphatic constitution, with a swelled upper lip and nose, which latter discharged constantly. The affection of the speech had lasted for several months, and was of this character: that she appeared as if frequently she made the effort to speak, and opened her lips and brought out a sound which she repeated several times, and then was silent. On the whole, she spoke much less than usual, and that with great difficulty, and it was easily remarked that the tongue moved heavily. *Calcarea* 9 was given every morning for three weeks, and did such good service, that after it was followed up by Bovista for fourteen days, the case was quite cured.

ON THE FOOD OF INFANTS,

By Mr. H. Turner, Chemist.

An article on this subject in the last number of the Journal, has reminded me, that I ought to make public, a method I discovered many years ago, of preparing what has been repeatedly mentioned as a desideratum, viz., *a food for infants, which shall contain all the constituents of the mother's milk in their proper proportions,* and which shall be at the same time cheaply and easily prepared.

The best food for infants is undoubtedly that which nature herself provides, viz., the child's own mother's milk; but sometimes mothers have no milk, or not sufficient for the child's nourishment, and in some cases it is expedient for other reasons that she should not nurse. In such cases it is usual to seek for a wet-nurse, who generally turns out a nuisance in the house, barely endurable. If the nurse has lost *her own child* of nearly the same age as the one she is engaged to suckle, her health good, and all parties satisfied, then nothing can be said against the arrangement; but if her own offspring is living, and if it has to be taken from her, and deprived of its own proper nourishment, an unnatural and cruel wrong is inflicted on the poor helpless and innocent sufferer; and if, as is often the case, the selected nurse is a mother but not a wife, the encouragement to immorality is so direct and positive, as to be shrunk from by all right minded persons, and vice is rewarded with a good home, good living, and little or no work. In other cases the infant is "dry-nursed," or "brought up by the hand," that is, if it should not happen to be killed by the process, as is too often the case, and then of *course it is* not "brought up" at all.

That improper food is the cause of much infant mortality there cannot be a doubt, and if there were, it would be removed by a Report* lately printed and circulated by Drs. Whitehead and Merei, giving the results of their most careful and painstaking investigations into the causes of mortality and disease amongst children. This report shews that more than 50 per cent. of children in Manchester die before they reach the age of five years, and of these by far the greater part die during the first year, the deaths being in the following relation to ages.

Under 12 months, of 146 patients 20 died, or 14 per cent. nearly.

From 1 to 2 years, of 105 patients 8 died, or 7½ per cent.

From 2 to 3 years, of 65 patients 4 died, or 6 per cent.

From 3 to 4 years, of 53 patients 2 died, or 4 per cent.

Above the age of 4 years to the 13th, of 161 patients no deaths had occurred.

The same Report shews that "70 per cent. of the deaths occurred from *abdominal diseases;* 72 per cent. were partly cases of deranged digestion, in most instances combined with diarrhœa, of either dietetic or atmospheric origin." It also shews that the number of badly developed children amongst the "hand-fed" was *six times as great* as among those fed with the milk of the breast alone. Here then we have an appalling amount of mortality, disease, and imperfect development, arising from errors in the diet of infants. The question is—*Can it be avoided?* And the reply—*It can.* How?

If we examine the constituents of the human milk and compare them with those of the cow, we shall find that they differ considerably. The following table shews the composition of different kinds of milk, as given by Henry and Chevallier.

* Children's Diseases: First Report of the Clinical Hospital for Diseases of Children, Manchester, containing an account of the results of the first 520 patients treated by A. S. Merei, M.D., and J. Whitehead, M.D.

Constituents.	Milk of the				
	Woman.	Cow.	Goat.	Ewe.	Ass.
Caseum	1·52	4·48	4·02	4·50	1·82
Butter	3·55	3·13	3·32	4·20	0·11
Sugar of Milk	6·50	4·77	5·28	5·00	6·08
Various Salts	0·45	0·60	0·58	0·68	0·34
Water	87·98	87·02	86·80	85·62	91·65
	100·00	100·00	100·00	100·00	100·00

From the above it will be seen that the milk of the cow differs from that of woman, in this principally, that it contains less sugar of milk and more caseum. The excess of the latter may be got rid of by precipitating with rennet, but this is a very troublesome process, and is open to other objections which it is not needful to notice, as I am about to suggest a much simpler method of accomplishing the end.

It is obvious that by diluting the milk with water we can lessen the relative proportion of caseum, and by previously dissolving sugar of milk in boiling water in the proper proportions, and diluting fresh cow's milk with it, we accomplish the two objects of lessening the relative quantity of caseum and increasing the relative quantity of sugar of milk at the same time. The following formula will give these results as nearly as is necessary for practical purposes, and it has the sanction of experience.

Dissolve one ounce of sugar of milk in three-quarters of a pint of boiling water, and mix with an equal quantity of good fresh cow's milk; let the infant be fed with this from the feeding bottle in the usual way. Always wash the bottle after feeding, and put the teat into cold water, and let it remain until wanted again.

The water in which the sugar of milk is dissolved should be thoroughly boiled to ensure the complete solution of the sugar of milk, and also to expel the air from it, which might cause flatulence.

If the child requires to be suckled in the night, a little of the prepared milk may be warmed in a pipkin by means of a spirit lamp. The occasional addition of a little fresh cream to the above food will be beneficial to the child.

I have had one of my own children fed as above from birth, and the results were all that could be wished. I have also recommended it in many other cases, and it has always been carried out with satisfaction.

ELECTRICITY,

By Dr. Chapman.

The ancient philosophers had wonderful intuitions, and made marvellous guesses at truth. Even that singular agent, electricity, whereby we could now send a message to Saturn or Jupiter, or to any point in space, if only the wire could be laid, was not altogether unknown to them. The word itself is derived from the Greek one, signifying an amalgam consisting of four parts of gold and one of silver, and also signifying "amber." Those ancient philosophers had a distinct appreciation of the intercommunion of atmospheric and telluric influences; and they went beyond our atmosphere to lunar, solar, and stellar influences. Their mythology expressed for the initiated their philosophical views of the powers of Nature, while to the populace it conveyed only vague and sensuous notions of gods and goddesses. Such men as Solon and Lycurgus, Pythagoras and Socrates, Æschylus and Plato, Demosthenes and Isocrates, no more believed in gods and goddesses than we do. They were *theists*, and believed in the Demiurgos: the FIRST CAUSE—the *cause* of *causation*, the Sole Independent Life, the Life-giving, on WHOM all inferior life depends. "In Him we live and move, and have our being."

That Pythagoras carried back with him to Greece, from Egypt, not a few of the precious seeds of the doctrine contained in the Hebrew Scriptures, is beyond a doubt. But

without direct revelation to guide them, and with their fragmentary lore of the Hebrew theology, the Greek philosophers did well in their mode of faith. They worshipped the Unknown God according to the testimony of an inspired apostle; and Him he declared to them in his day.

This worship of the Life-giving One was the secret of the Eleusyrian mysteries, preserved to this day in what is called Free-masonry. With the super-added cruelties of heathenry, this too, it seems, was the secret of Druid worship, while yet the inhabitants of Britain were clad in the skins of animals, and painted their bodies, and were, in fact savages. Stonehenge and Mona, and divers other places, yet retain the traces of that old Druidical worship.

In the Orphic poems, the hymns of Homer, the verse of Hesiod, the choruses of Æschylus, the prose of Plato, the powers of nature are vividly set forth. Every scholar is aware of the import of those old intimations of the Divine Presence in material forms. Except on the theory of tradition, or that of direct inspiration, it would be impossible to account for the pure theism of the Greeks. Their doctrine of the harmony of the spheres was derived from their notion of electrical influence. It is a pleasure to give a hint of it in the words of our Shakspere, the true scholar of nature, the myriad-minded man, the most wonderful of seers not actually inspired—possessed of all the real wisdom of his age, and even now before the ages to come in sagacity and true philosophy:—

> "How sweet the moonlight sleeps upon this bank!
> Here will we sit and let the sounds of music
> Creep in our ears: soft stillness and the night
> Become the touches of sweet harmony.
> Sit, Jessica: look, how the floor of heaven
> Is thick inlaid with patines of bright gold.
> There's not the smallest orb which thou behold'st,
> But in his motion like an angel sings,
> Still quiring to the young-eyed cherubim:—
> Such harmony is in immortal souls;
> But whilst this muddy vesture of decay
> Doth grossly close it in, we cannot hear it."

The doctrine of the ancients, of the four elements, was in truth the teaching of electrical affinity or repulsion. When the over-hanging heaven and the low-lying earth were in due relation, without disturbance, the earth, watered with the early and latter rain, gave forth her increase. See the use Milton makes of this philosophy:—

> "he in delight
> Both of her beauty and submissive charms,
> Smiled with superior love, as Jupiter
> On Juno smiles, when he impregns the clouds
> That shed May flowers."

Those wise ancients had a notion of a power that pervades the universe, the *Anima Mundi*, which, by a given law of the DEMIURGOS, keeps the procession of the heavenly bodies in harmonious accord, and at once governs the motions of the planets and gives life to whatever lives. The subtle agency they had in their thought is what we now call electricity. Take the expression of the thought in the words of Virgil, as done into English by Dryden:—

> "Know first that heaven and earth's compacted frame
> And flowing waters, and the starry flame,
> And both the radiant lights,—one common soul
> Inspires, and feeds, and animates the whole.
> The active spirit, interfused through space,
> Unites and mingles with the mighty mass!
> Hence men and beasts the breath of life obtain,
> And birds of air and monsters of the main.
> The etherial vigour is in all the same,
> And every soul is filled with equal flame—
> As much as earthy limbs and gross allay
> Of mortal members, subject to decay,
> Blunt not the beams of heaven and edge of day."

The science of *physics* embraces all nature, all created things great or small—the universe. As the finite cannot grasp the infinite, no created intellect can go beyond the creation. The creature can neither apprehend nor comprehend the Creator. But within the assigned range of its faculties, the powers of the human mind are shewn by the

attainment of the highest mathematics, and the astonishing discoveries in physical science.

Our present subject is one of the most remarkable that has engaged the thoughts of sages and philosophers. The amount of human knowledge has grown up to its present audacious height by infinitesimal increments. Ever and anon, men of gigantic intellect, or those endued with the happy prevision of the seer-faculty, have given a bodily presentment, form, and substance to ideas that have been for long flowing and ebbing loosely in the minds of many successive generations. They have thus made spoil and property of many a waif of thought. The telescope and the microscope, and the laboratory of the chemist, and the chambers of imagery in the brain of the thinker, have indeed brought about many wonders in the *microcosm* of the human race.

One of the earliest observations of philosophy that is recorded is, that yellow amber, when rubbed, has the property of attracting light bodies. Thales, who flourished six centuries before the Christian era, imagined from this property that amber was *animated*. Theophrastus, who lived three centuries later, enters into a description of it. Pliny, and succeeding naturalists, adverted to this property of amber of attracting straws, small pieces of sticks, and even thin pieces of copper and iron. An Englishman, Dr. Gilbert, in the year 1600, published a treatise, "De Magnete," in which he relates many electrical experiments. He led the way among the moderns, and was, in fact, the morning star of that flood of discoveries which have been made since his time. He found the power of attracting light bodies not only in amber and jet, but in the diamond, sapphire, carbuncle, opal, beryl, crystal, and other substances.

Another Englishman, about seventy years later, took the subject up, and made many useful experiments. This was the justly celebrated Boyle.

It is worth while to mention that Sir Isaac Newton took a deep interest in this subject, and made some interesting experiments.

Hawksbee, Grey, and other Englishmen continued to investigate the phenomena of electricity down to the year 1733, and so far the development of this wonderful agent is due to our countrymen. Watson, and the English-born Franklin, the American patriot, came next in point of time, with the interposition of a few Frenchmen and Germans of just celebrity. Since that time a wonderful progress has been made in this department of *physics*.

Hippocrates has the credit of having first applied the term Φύσις as expressive of the generative powers of nature, and of the pervading principle of created existences, whereby they are conserved and accomplish the ends of their being. It was correctly observed by Golding Bird that our language is the only one that applies the term *physician* to one that practises the healing art, therefore it is implied that our physicians should not confine themselves within the narrow orbit of Galenics, but should avail themselves of all the light that is given out by the physical sciences. In this sense of the word the true physician is among the most noble of men. He takes rank before the Cæsars of the world. The healers should always go before the slayers of mankind. It is only the base worship of the brute nature that puts conquerors before physicians. Whether the *vis vitæ*, the animating and life-preserving principle of corporeal life is of an electrical character we know not. It may be so. True physiology seems to point in that direction.

The phenomena of electro-chemistry have been investigatd by Franklin, Priestley, Cavendish, Davy, Guy-Lussac, Thenard, Faraday, and a host of others.

In 1791 Galvani published his essay "De viribus electricatis in motu musculari." He asserted that a form of electricity existed in animals. This he called animal electricity. This seems now to be an established fact. The illustrious Matteucci, of Pisa, has proved that currents of electricity are always passing to and fro in animate bodies; and on the due equilibrium of these it has been asserted that life depends. Whatever be the *vis nervosa*, whether an electrical fluid or not, that on it depends the due performance of the vital

functions, there seems to be no reason to doubt. Sir John Herschel has expressed in his essay on the "Study of Natural Philosophy" the possible relation between galvanic electricity and the *vis nervosa,* and observes that "if the brain be an electric pile constantly in action, it may be conceived to discharge itself at regular intervals, when the tension of the electricity reaches a certain point, along the nerves which communicate with the heart, and thus to excite the pulsation of that organ."

Of the connexion between electricity and the "nervous force" of the human body much has been written, and on the supposition that such a connexion exists, it may be expected that some light may be ultimately thrown on the homœopathic law of healing, and on the efficacy of small forces in affecting the vital œconomy.

Touching this connexion Dr. Golding Bird thus expressed himself; "Let us, then, see what light analogy can throw on the connexion of electricity with the nervous influences, and I would ask, may not one of the uses of the electricity so freely developed in the body, especially that existing in the muscles, be to excite in the nervous cords the *vis nervosa,* just as currents, if passing near a bar of iron, at right angles to its axis, excite magnetism; may not this *vis nervosa,* or nervous polarity, excite the contraction of a muscle without actual contact with its fibres, (for we know that the fibrillæ of nerves lie upon, but do not communicate with the alternate fibres of muscles), just as the invisible lines of force emanating from the bars of a magnet act upon the suspended bundles of wire or iron filings? Lastly may not such nervous force again induce electric currents in any glandular or other organs, just as magnetism in motion will re-excite electricity? thus accounting for what cannot be questioned, the existence of electric currents in certain organs, exclusively excited by, or depending for their existence upon, the integrity of the nervous influence of the part."

Professor Faraday has shewn that magnetism is an agent of almost universal character. It is ascertained that electricity exists, to an untold amount, in the human body; and the

application of it in the way of manual magnetism, the turning to profitable account the *waste* of this magnificent agency, has been already advocated.

The writer maintains that the human hand has a magnetic influence; that it is capable of collecting and of applying the otherwise waste of the human body, to curative purposes. Long before Oersted and Faraday our illustrious Bacon became aware of many of the phenomena of magnetism.

Of the various applications of electricity, galvanism, the magnet, the electro-magnet, for curative purposes, the readers of this Journal are fully cognizant. The effects of each kind should be separately *proved*, and then be applied, according to our benign law, with a direct view to the totality of the symptoms in any given case. But the curative effects of all or of any of these *imponderables*, may depend on a law or laws of which we at present know nothing.

The writer, while living at Liverpool, had during three successive years, three successive attacks of acute lumbago. What the suffering is only those who have endured it can appreciate. In the first attack, it was aggravated in a state of rest, relieved by walking about; he took Rhus toxicodendron, and, excepting the loss of a night's rest, was none the worse. He was quite well the next day. In the next attack, the pain was aggravated by the slightest movement; he took Bryony with a like good result. On the third occasion, neither of these conditions was present; the pain was equally intolerable, whether in a state of rest or of motion. He applied the electro-magnet, and was as signally cured. Neither of these attacks lasted more than twelve hours.

How small an amount of electric force is sufficient to produce the greatest effects, in the curative direction, we need not insist on: *minimis vis maxima inest* is assuredly a law of nature. The truly philosophical mind derives even more evidence of the wonderful and ineffable wisdom of the Creator from the microscope than it can derive from the telescope. Ask any philosopher who is equally conversant with the use of the instruments in both fields of observation.

The application of the electro-magnetic battery, in cases of

uterine hemorrhage has been sanctioned by Dr. Lever. The following case of Mr. Cleveland has been reported by Dr. Golding Bird.

"I was requested to see M. C., aged 39, in her sixteenth confinement, on Friday morning, June 6th, 1845. On my arrival at the house, I learned that her previous labours had been tolerably good, with two or three exceptions, when they had been considerably protracted from want of pains.

"On the Sunday evening prior to my visiting her, she had the premonitory symptoms of labour, soon succeeded by regular and frequent pains, which never entirely left her till Wednesday night, when the *liquor amnii* was discharged.

"At one A.M. on the Friday, the pains returned with considerable vigour, but did not last above an hour; at six A.M. they were again renewed for a short time. It was about four hours after this period that I found Mr. T., a medical practitioner in the neighbourhood, with the patient. He had administered a dose of the tincture of Ergot, and also some spirit and water, but these measures were followed by only a few and ineffectual pains.

"Having ascertained by examination that there was no obstacle to the termination of the case but a want of contraction of the uterus, and believing that no time should be lost, I resolved on a trial of electricity. I was gratified to find that a very decided effect was produced. Regular, strong, and frequent pains came on: and in the course of a quarter of an hour, a living male child and placenta were expelled, attended with the least degree of hemorrhage I ever witnessed. The uterus was immediately, firmly, and permanently contracted."

Let our opponents weigh the evidence of the power of small forces recorded by one they justly delighted to honour. Golding Bird was one of those who did honour to our noble profession, and the premature death of such a man, when such men are rare, is to be lamented by all true lovers of medical science. He was a man without blame in his exterior life, and in his inner life he had found the pearl beyond all price—*Si sic omnes!*

The writer believes that, though he may not have reached the right end of his coil, there is much truth in the views of Mr. Rutter of Brighton, and that his magnetoscope has been prematurely consigned to the tomb of forgotten things. Whether by him or some future experimenter, the fact of the electrical currents in the human body, and the law for their direction, will be ascertained and made plain.

Electricity, galvanism, and the electro-magnetic battery have been used freely for many affections of the nervous system, for chorea especially. It is asserted, and many successful cases have been recorded, that these means have been very beneficial in cases of amenorrhœa and chlorosis. They have been used beneficially for cases of paralysis from the poison of lead, from rheumatism, from local injuries, and from hysteria. The cases recited by different authorities are very interesting; and prove beyond a doubt the efficacy of this mode of treatment.

To us homœopathists the action of *imponderabilia* cannot be out of place, or appear to be absurd. Our remedies, more or less, partake of this imponderable character. It has pleased some of our distinguished colleagues to deny the curative effects of the magnet, which, nevertheless, the writer has used with signal effect in some cases. He holds that the curative effects of electricity, galvanism, the electro-magnet, and the magnet, in cases suitable for their application, are undoubted. It would indeed be a strange thing if while the allopathists on occasion use these means, they should be excluded from the domain of homœopathy.

For all the so-called nervous affections, when the nervous centres or their off-shoots are at fault, these *imponderabilia*, each of them according to its kind, are of great value. It is not wise to ignore the experience of Hahnemann, nor to throw contempt on his actual knowledge on the *ipse dixit* of any chemical philosopher, however admirable he may be in his own sphere of science.

In the present state of our knowledge no one with any [illegible]ce to the character of a physician can ignore the [illegible]al electrical influences that are about our bed and

our path, in whatsoever direction we go. How small an amount of electric force is required to lay waste a city, or to devastate a country! A minute force of this kind ages ago laid Lisbon in ruins, and influencing the great Atlantic roll of waves, caused the sea in one of the islands of the Caribbean Archipelago to rise many feet beyond the high water mark. It is the province of intellect and of science to compel the forces of nature into the service of man—the lord of this earth and of all its continents and dependencies. Whether it be by kite-flying, as in the case of Franklin, or by experiments on animals as in the case of many philosophers, electricity—the vague dream of the ancients—has been brought home to us all. The electric light, at no distant period, will illuminate our houses and our streets. From it we shall derive warmth. It will be turned to account in our locomotives by land or by sea. It is nothing strange that it should be applied, in some form or other, to the assuagement of the disorders or diseases of our mortal bodies. The homœopathists who profess to deal with *imponderables* should be among the foremost to encourage the application of all electric influences to the cure of disorder or of disease.

Homœopathy is the law of drug-healing. Neither the writer nor any other person who practises homœopathy, whose opinion is worth anything, has ever asserted more for it. It is not to be supposed that Hahnemann ever intended to assert more for his law of healing. It is a great mistake to suppose that there must be of necessity no other law of healing than that by drugs. The finite cannot measure the infinite. The crawlers and creepers on this earth are not in condition to enter into controversy with the Creator. We know nothing of the abysses of space; our knowledge of spiritual essences is absolut[illegible] to nothing. In a sense, the more we [illegible] In proportion to a man's real [illegible] It is in this spirit we mu[illegible] with electric forces.

It seems to [illegible] of *the homœopathi*[illegible]

force, if they be duly prepared. It is the fashion of some to confine themselves to the grosser forms, the lower dilutions. These seem to answer best for acute disease; but the writer is fully persuaded that the higher dilutions answer best for chronic diseases; nay, that chronic diseases are not curable by the grosser materialistic preparations. He is not ashamed to stand by the side of Hahnemann upon this proposition.

The writer has, at different times, employed electricity and galvanism in the treatment of divers affections. He has of late years employed the battery of Mr. Piggott, and in some cases with decided success.

He at present passes by the different applications with which his readers are familiar, to call the attention of his colleagues to the practice of Mr. Beckensteiner.

This philosopher was born at Augsburg, in Germany, in 1800. From his boyhood he was destined by his father for scientific pursuits. When he was twelve years old his father died; and his studies in the direction of a future scientific career, were for the time interrupted. Notwithstanding, as soon as it was in his power he purchased books and instruments to advance him in his study of electricity, which had attracted his attention and his passionate devotion, even in his boyhood. "The child is father of the man," is an expression of the poet that has in no instance been more verified than in the person of Mr. Beckensteiner. In his boyish days he was addicted also to an eager delight iu entomological pursuits. Electricity and entomology have been the pursuits of his early and mature life. In both sciences he is an adept.

Since the year 1836, he has applied electricity for the cure of disorders and diseases. He has learned to methodise his applications, and his electrical therapeutics are worthy of the consideration and study of all physicians.

It is curious to observe that his researches, independently of every bias on his part, go to confirm the law and the [illegible]e or even infinitesimal dose of the homœopathist. He [illegible]anthropist, and like all enthusiasts has a notion that [illegible] cure, at least in chronic diseases, must [illegible] methods. It is the enthusiast of one

idea, in the practical sense, that does wonders. But Mr. Beckensteiner is a philosopher, as well as an enthusiast. It will not do to ignore so long an experience of such a man. He is a good physiologist, and has an accurate knowledge of the nervous system. The remainder of this paper will be devoted to a brief sketch of his views and his practice.

According to Mr. Beckensteiner, and in accordance with physiology, the nervous fluid is equally distributed throughout the organism, when there is entire health. A nervous current, moderate and equalised, continually ascends from the extremities to the brain, from which it is again transmitted along the great nervous tract, the spinal marrow. In other words, a gentle nervous current is perpetually passing and repassing through the body.

In a state of disease, this current is more or less disturbed. Electricity, which bears a close analogy to this nervous current, if it is not identical with it, not only may be, and should be employed as a curative agent, when there is any disturbance of the equilibrium of the current, but may be used as a sort of speculum to discover any lesions or alterations, whether superficial or in the deeper tissues and organs of the body.

The curative aim of the person who scientifically employs electricity, is to restore the equilibrium of the interrupted electrical current.

According to Mr. Beckensteiner, it is a too great loss of electricity which causes fatigue after bodily or mental labour; and electricity, applied for a short time, supplies the place of a long rest.

Of the connexion between atmospherical electricity and its disturbances, and the electricity of and in the human body, and the sufferings of the enfeebled and those afflicted with nervous disorders, Mr. Beckensteiner speaks authoritatively.

He remarks that during infancy and childhood a healthy atmosphere is especially necessary, as the child not only has the human life to maintain, but also has the task of growth imposed on it.

During the period of advancing age he considers that

electricity may be beneficially employed, not only to prolong life, but to make that life enjoyable. In old people the natural electricity is sensibly diminished. Thence, there is less elasticity of the motive powers; less quickness of the mental faculties. He has observed that old persons devour, as it were, applied electricity, as a dry soil quickly absorbs the moisture applied to it. He believes that copious electricity applied in winter, and less in the spring and autumn, would prolong life, and promote the health of the aged.

He believes that electricity applied according to his method is *animalised;* that is, there is a mesmeric action of the operator combined with that of electricity, or of any medicinal substance electrically applied. In his own practice he considers that his own mind applied with a strong will energises either the direct electricity, or the medicinal substances electrically applied to the patient.

He uses the old electrical machine, considerably modified by him and improved in its construction. The patient is isolated, and is acted on by the operator, by friction, or the application of metallic rods (excitators), the metal being chosen according to the nature of the case, or the application of other medicinal substances. Electrified water is given to the patient. Electric currents are employed. There is no medicinal substance, of any kind whatever, that may not be applied, by his method, to patients.

In his treatment then of chronic diseases, there is a three-fold agency; the will of the operator as well as his hands, electricity, and medicinal substances electrically applied.

He ascribes the highest importance to *aurum* as a curative agent. He has found it of the greatest service in scrofulous and syphilitic cases. He regards it as a most powerful tonic, and asserts that it energises the whole nervous system. Of all metals he thinks it the chief in the treatment of cases of paralysis. He employs it for myelitis, and for paralytic or other affections of the bladder. He has found it curative in cases of facial neuralgia, using after it a current of iodium. In affections of the lymphatic system he

applies gold, followed also by a current of iodium. For moral disturbances, depression of spirits, for tendency to suicide, and for irritability of temper, he has applied, with success, this important remedy. In affections of the joints he has also used it with great benefit.

He uses *argentum* for severe headaches; and for affections of the heart; for chorea; for epilepsy; for sleeplessness, and a variety of nervous affections: he considers it to be a most soothing remedy for affections of the head and of the chest.

Antimony is another of the remedies he often employs. He claims for metallic Antimony powerful energies when it is employed as an aid to medical electricity: his experience is, that it acts immediately on affections of the respiratory organs. He uses it in cases of chronic bronchitis; for chronic laryngitis, and in cases of tubercular phthisis. In his estimation it is a precious curative agent.

He uses *ferrum* for amenorrhœa; dyspepsia; engorgement of the bile ducts, and unequal circulation: for certain kinds of cerebral congestion; for deafness; and for noises in the head and ears. In such cases he applies it, as a derivative, to to the lower extremities.

He administers *zinc* for lumbago and sciatica, and for pains in the lower extremities.

He uses *stannum* for tetanic affections; for crampoid contractions of the upper extremities; for facial neuralgia with distortion; and for some affections of the joints.

He employs *cuprum* for colicky affections; and *plumbum* for pimples of the face; and the different forms of *acne*. He observes that these two metals are the most dangerous for the operator.

Iodium is a remedy he [illegible] for glandular swellings; goitres, and various af[illegible] of the lymphatic system. He emplo[illegible] conjunc[illegible] neuralgia.

He [illegible]

Cur[illegible] exhausted vitality.

He ad[illegible] of the periost[illegible]

Valerian, musk, and assafœtida have been applied by him for various nervous affections.

He uses electrified water—chiefly electrified with gold—and applies douches electrified, and with divers medicinal agents.

Mr. Beckensteiner has treated upwards of ten thousand cases of persons suffering from various kinds of chronic malady; and asserts that his cures and ameliorations have been ninety per cent. There never was a more single-minded man, and he fully believes what he asserts.

Our colleague, Dr. Rapou, of Lyons, in his "History of the Medical Homœopathic Doctrine," thus writes of this method of treatment:—

"I cannot here forbear to mention a discovery that has been made by our electrician, Mr. Beckensteiner, of Lyons, who believes that he has established, from a very large number of facts, that the electric fluid not only pervades the surface of bodies, as has heretofore been asserted, but that it is diffused also among the interstices and molecules of the whole of these bodies, out of which it extracts, when it is in motion, some of the molecular substance. Mr. Beckensteiner has in his possession rods of copper, of two *lines* of thickness, which after having been used for several years as excitators, shew on their surface several fine furrows which art could not have produced, and which, according to him, were caused by electrical action. The happy idea occurred to him of applying this fact to medicine, in communicating the electrical fluid through an excitator of copper; and under certain circumstances, he has produced in persons of perfect health the group of symptoms that characterises the colic of cuprum. With a ball of iron he has communicated to water a ferruginous taste. If metallic wires (of silver for instance) penetrate through aromatic substances enclosed in a glass case, the aroma of those substances is immediately and sensibly extracted.

electricity, according to Mr. Beckensteiner, attracts ecules in a state of tenuity comparable with the ilutions of Hahnemann. Medicinal applica-

tions may thus be made in a way preferable to corresponding dilutions prepared by the hand.

"Persuaded of the reality of molecular transmission, Mr. Beckensteiner administers in this way to patients various medicinal substances, such as the metals, &c. Of the metals, he employs gold most frequently. In individuals affected with a combination of mercurial and syphilitic symptoms, he has obtained excellent results from giving them to drink abundant quantities of *gold-electrified* water. According to him, gold exerts a specific action on the heart and arterial circulation. It is a tonic-excitant for the whole organism, especially for the blood system. Silver acts beneficially on the head and organs of the senses. Iron manifests its properties when applied electrically; it soothes the patient suffering from plethora when applied to the lower extremities, by sparks; it produces a discoloration of the face, which passes to a morbid pallor.

"Cuprum causes enteralgia, and cures it. Stannum relaxes the muscular fibre; its action is opposed to that of gold. Antimony acts as a sedative for the respiratory organs. Phthisical patients receive marked benefit from electrisation with a rod of Antimony. Persons who suffer from bronchial catarrhs are often speedily cured by this remedy so applied. *Plumbum* has soon cured cases of inveterate acne.

"The recent discovery of the 'corpuscles of Paccini' in the human subject, gives increased importance to animalised electricity. No doubt this [illegible] will become, in the hands of [illegible] with its laws, a proce[illegible] in point of utility wit[illegible] kind.

"Electrici[illegible] The action of ligh[illegible] Electricity, ap[illegible] may fulfil more [illegible] indications for w[illegible] are usually emplo[illegible] force."

The views of M[illegible]

stated; but it is necessary to explain what he means by the animalisation of electricity. The operator is not isolated, while the patient is. The nervous fluid, according to him, of the operator is combined with the electricity which is transmitted to him, to act conjointly on the atoms of the materials (metallic, metalloid, or whatever else) held in his hands, while he is non-isolated, and so to act on the nervous action and organism of the patient. Further, the *will* of the operator goes for much, indeed for a great deal, according to his own account of his treatment. He recites this case as illustrative of the action of the will of the operator.

"In 1847, I electrified the Abbé C—, who had been afflicted with chorea for more than forty years. In consequence of his want of perseverance, I only obtained slight ameliorations in his case. He had tried so often so many remedies without success that he was soon tired of my treatment. During the following year, however, he came to me to submit himself again to the action of electricity, not that he hoped any cure for the chorea, but for the purpose of obtaining sleep, as he suffered much from sleeplessness. I had recourse, without any advantage, to all the soothing means I could think of, and such as I usually employ by electricity, such as currents with silver, valerian, and musk. I then attempted to establish, with my hands only, a current from his head to his feet, and I succeeded with the first attempt to calm his sleepless restlessness. On repeating this process for some days, I succeeded in obtaining for him, every night, sleep from four to five hours. Since that time I have pursued this practice for sleeplessness, and I have almost invariably succeeded in obtaining sleep for the patient, after two or three *séances*. From such results I was led to admit the participation of the nervous fluid of the operator (with the electricity), and also the influence of his will."

He thus believes that electricity, or the virtues of metals
inal substances, are affected by their trans-
the non-isolated operator (that is, are ani-
n expression); and that thus a modified

action is produced on the patient. He has observed that he is more fatigued by electrifying one or two phthisical or attenuated patients, than by acting on a dozen others. The same remark has been made by those who practise manual magnetism. Mr. Beckensteiner states that he has found that such patients frequently gain weight from day to day, and that the operator has, in some measure, lost weight the while.

The writer is aware that he has very imperfectly given a mere outline of Mr. Beckensteiner's treatment; but he doubts not that great advantage may be derived from it in a great variety of cases, especially where there is a defective vitality, and for those suffering from disorders of the nervous system. The power of applying medicinal agencies, homœopathic to the case, is of great importance, if there be reality in the convictions and long and large experience of this philosopher. The conjoint and modified action of the electricity, the operator, and medicinal applications made by electricity, is worthy of consideration.

At the annual meeting of the British Homœopathic Society, Mr. Beckensteiner was present during the discussion of a very interesting paper on epilepsy, by Dr. Rutherfurd Russell, and stated that he had been very successful in treating such cases. In his opinion, these cases (where there is no organic lesion) are mostly due to masturbation or sexual excesses. He mentioned that while by grasping tightly the patient above the ankles an attack of chorea might be prevented, an attack of epilepsy may often be prevented by the patient, who has a premonition of the attack, by having the arms grasped tightly just above the wrists.

I proceed now to give some cases: some of them are those of persons I have submitted to this method of treatment, the rest were treated by Mr. Beckensteiner at Lyons,—but all of them have been treated by him.

1.—Madame D——, aged 20 years, was in the third month of her first pregnancy, when she applied to Mr. Beckensteiner on account of an intense chorea, from which

she had suffered seventeen days. Complete loss of sleep; and almost continued convulsive movements of all the limbs; spasmodic distortions of the face; entire loss of appetite; continual headache. All the means previously employed had been totally ineffectual. The electrician treated her by electric currents, with a rod of silver over the head and the affected limbs. These at once produced some amelioration; he followed them up with currents with Valerian, and these with currents with his hand only, over all the affected limbs. These processes were repeated again later in the day. The lady passed a quiet night, and slept a little, which she had not done for seventeen days. On the following day the same processes were repeated, and, in addition, frictions with the hand were applied down the spine. In ten days the patient was cured. She was delivered in due time of a healthy child; and the following year she was again a mother; and neither of her children have shewn any tendency to chorea.

2.—Mr. De V., 18 years old, of a naturally strong constitution, had experienced several symptoms of a fever of a low type. He had lost flesh, suffered from want of sleep, and was so feeble that he could not walk any time without extreme fatigue. It was impossible for him to continue his studies. Loss of appetite; almost continual headache, increasing and coincident with bleeding from the nose after taking food. He was sent by his physician from Versailles, where he was a student, to his family in Burgundy, to have the advantage of country air, and rest from all attempts at study. The means employed to restore him to strength and health were ineffectual. This young man was taken to Mr. Beckensteiner on the 10th of June, 1850. He used for him currents and sparks with gold along the spinal column; currents with silver were applied to the head; and currents with iron were applied to the stomach; and frictions with the hand over the legs and thighs. On the ninth day of treatment he began to shew signs of improvement; in seven-

teen days he was cured. Each day the processes occupied from five to six minutes. He went home quite cured.

This was a case of a shock, from whatever cause, to the nervous system, which may have issued in fatal disease. Might not many cases of threatened illness, from a disturbance of the nervous forces, be averted by the use of these electrical appliances?

3.—Madame C., 40 years old, had for a long time been afflicted with neuralgia of the right side of the face, which had become much worse during some months that preceded her application to Mr. Beckensteiner. It seemed that this was an affection of the fifth pair of nerves. Her medical attendant, after vainly trying other means, thought of dividing one of the facial branches of the nerve; but before he had recourse to this measure, he recommended that a trial should be made of Mr. Beckensteiner's method of medical electricity. Her frightful sufferings disabled her from going to Mr. Beckensteiner's house. He applied sparks with a ball of gold over the parts affected with pain, and, immediately after, currents of Iodium. The pains ceased, but recurred during the night. The next day the same treatment was pursued, with the addition of frictions with the hand over the thighs and the legs. The lady was cured in a few days.

4.—Victor de V., aged 7 years, of a naturally good constitution, had, at Bourg, an attack of influenza, which began the 30th of April, 1851. He was speedily cured. But, being very fond of reading, he gave himself up to it exclusively, during his convalescence. After a little time his parents perceived that his sight was enfeebled; he could not write small letters, but only a large hand; the letters appeared to him to have each three strokes instead of one. Soon he could not read; the letters on the page seemed blurred and effaced; he could not distinguish them. The medical gentleman who saw him pronounced that it was

a nervous feebleness of sight, and recommended entire rest for his eyes. As he did not get better, his parents took him to Mr. Beckensteiner, at Lyons, who saw him for the first time on the 21st of May, 1851. He pronounced that there was an amaurotic affection of both eyes, the right being in a worse condition than the left. The pupil of that eye was oval, instead of being round, and dilated very slowly on the withdrawal of light. There was no pain nor photophobia. As the boy was very impressionable, and could support neither frictions nor sparks, the electrician employed currents with the diamond, applied alternately over the two pupils; he applied currents with Valerian round the eyes and towards the cerebellum; and lastly, currents with the stem of a silver rod over the eyes and over the whole head.

The patient had these appliances administered daily, for five minutes each day, and at the end of three days he could read without fatigue an article in a newspaper. He was induced every day to read, varying the size of the letters in different volumes. The angular shape of the pupil of the right eye continued to the 31st of May, when it ceased; and both eyes were restored to their normal state. On the 3rd of June, in addition to the appliances already stated, frictions were employed. On the 4th of June the cure was complete. The treatment lasted a fortnight, and there were in all twenty-six applications of these means.

5.—A boy, aged 12 years, of a nervous temperament, and with moderate constitutional vigour, had suffered from hooping cough four months. When Mr. Beckensteiner first saw him, he was very feeble, and had *wasted* considerably. Several distinguished physicians had pronounced him to be suffering from tubercular phthisis, and that the apex of the left lung was especially affected. Their prognosis was, of course, very unfavourable. The expectoration was, at times, bloody; and the respiration was very hurried. He suffered from continual cough and fever, with nocturnal exacerbations. Mr. Beckensteiner commenced his treatment of this case on the 8th of May, employing currents with

Antimony over the chest and over the back. From the 15th of May sparks with Antimony were also applied behind the shoulders. From the 25th of the same month, in addition to the above means, sparks with gold and antimony were applied along the vertebral column; currents and some sparks, with iron, were applied to the epigastrium, and downwards to the feet; and lastly, frictions were made with the hands over the thighs and the legs.

On the 3rd of June the disease had nearly disappeared. The cough and fever had gradually abated; the expectoration and respiration had become, also gradually, almost normal. It was surprising to observe the rapidity with which the vital forces had recovered themselves, and the waste of flesh had been repaired. On the 13th of May, 1850, he weighed 64 lbs.; on the 15th of June he weighed 66½; and on the 2nd of December he weighed 75.

In this case antimony acted specifically and diffusedly through all the respiratory passages, and contributed to the cure by resolution, acting directly and indirectly on the parts choked up and sown with tubercles. The sparks with gold and antimony applied along the vertebral column, in acting on the part of the nervous system which contributes to maintain the energy of the pneumo-gastric nerves, and the derivation on the lower extremities, essentially promoted the success of the currents of antimony.

6.—The son of a distinguished physician of Lyons, six years old, of a good constitution, was put under Mr. Beckensteiner's treatment with the following symptoms:

Stuffing of the nostrils; sensation of pricking in the tongue with elevation of the papillæ; irritation of the pharynx with some difficulty of deglutition; entire loss of appetite; relaxation of the bowels; cough with pains in many parts of the chest. Some demulcents had been given him. The electrician applied these means: currents with antimony from the nostrils to the epigastrium; currents with iron from the stomach to the navel; currents, and *some sparks,* with gold along the vertebral column; frictions

with the hand on the thighs and legs. The first application of these means lasted four minutes; and was repeated an hour after. The child then returned home quite cured, and his health continued uninterrupted.

In this case there was no pronounced disease, but a tendency to the localization of some serious malady. The application of gold beneficially acted on the spinal nervous system, that of antimony on the respiratory organs, and that of iron on the digestive system; and lastly, a beneficial derivation to the lower extremities was produced by frictions with the hands.

7.—A woman of middle age had suffered for a considerable time from rheumatic pains in both her shoulders, and in her elbows and knees, which had been brought on by frequent exposure to damp and wet. The pain and stiffness were very great, and she had, after various modes of treatment, recourse to Mr. Beckensteiner. Zinc and gold were the metals he employed, and she was cured in a month.

8.—A cook in a gentleman's family, having, after her work before the kitchen fire, been exposed to the cold night air, became suddenly affected with pain and weakness in her knees, the extensors of which were partially paralysed. The pain was very acute. She was cured in five sittings. Sparks with the gold excitator, and manual frictions principally directed to the knees and extensors, were the means employed.

9.—Madame ——, of a nervous temperament, and delicate constitution, the mother of four children, had, since her last confinement, suffered from severe hysterical attacks. Cauterization of the neck of the womb had been applied, on account of supposed ulcerations. After that treatment her hysterical symptoms were aggravated, and her general health was considerably impaired. She lost flesh, and looked much older than she really was. She had a sense of spasmodic constriction in breathing, which she described as a pressure

all round the margin of the lower ribs; her breathing was like that of an asthmatic person. She suffered also from frontal headache, and from lumbar pains. In this condition she went under Mr. Beckensteiner's treatment. In three weeks she was considerably improved in health, and had increased walking power. She had electrified water, gold and platina, according to the indications, and a current of silver was applied to the head. She was cured.

10. Madame ——, had been married eight years. She had for some time suffered from most distressing hysterical attacks. She was also suffering from bearing down (uterine) pains; and from a wearisome aching that commenced in the region of the spleen and passed over the abdomen downward to the left foot. She had, for five years, been under allopathic treatment; and local treatment had been employed for ulceration and engorgement of the neck of the womb. Her sufferings had been greatly increased by this method of treatment. Under electricity she gradually but steadily made progress to health, and her health was completely restored.

11.—A young man, aged 18, had previously had his hearing restored by electricity, when he had deafness of the right ear from obstruction of the Eustachian tube. After exposure to rain, a relapse had taken place. He suffered from coryza, and the tonsils were much enlarged. He was cured in four sittings. Local douches and sparks were applied to the meatus externus of the right ear; and currents of silver and antimony over the face on the right side.

12.—A married lady, aged 38, had suffered during four years from intense headaches, which at times were almost unbearable. She had constantly a dull aching over the eyes and at the occipital region; she complained of heavy pressure at the top of the head; she had, occasionally, pain in the eyes, and at times her hearing became dull; the extremities, from knee to toes, were of icy coldness. This was

her condition when the electrical treatment was commenced. It consisted of derivative applications to the feet and legs; currents of silver and valerian were applied to the head, and she drank electrified water. She was cured.

13.—A married lady, 40 years old, robust and plethoric, had suffered for a week from the most intense pains in the right side of her face, and especially round the right ear. She had no relief night nor day. The face was red and somewhat puffed; her legs and feet were cold. She stated that she had a similar attack three years previously, which lasted upwards of three mouths. She was cured, electrically, in three days. Currents of gold, followed by currents of iodine, were the chief medications; some currents of iron were applied to the abdomen; and a strong derivative treatment, by frictions, was applied to the legs and feet.

14.—Mr. ——, a man of energetic character and great bodily vigour, took it in his head to be a strict vegetarian during eight months; he then returned to the use of animal food, and suffered from nausea and colicky pains. He made a short voyage, and travelled a long distance on railways. The nausea, short of actual vomiting, of his voyage, and the shaking of the railway carriages, increased his sufferings. The abdomen was distended and was painful to the touch, obviously from the incarceration of flatus. He had no appetite, and suffered from constipation; he was depressed in spirits, and had pain in both hypochondrial regions. With these symptoms he began the electrical treatment, which was applied to him twice a day for a fortnight; and being cured of his colic he forgot again his vegetarianism, and indulged his appetite in partaking of the dainties of a *vintage feast* without inconvenience. Currents of cuprum, electrified water, and frictions over the lumbar region, were the chief applications in this case.

15.—Mr. —— had a considerable enlargement of the cervical glands on the left side. The swelling was almost of

a scirrhous hardness. This character of hardness diminished considerably from the use of Iodium given in homœopathic doses. Some electric currents were applied by Mr. Beckensteiner, at the writer's request, and a marked improvement took place; but the gentleman was obliged to go to Germany, and the electrical treatment was therefore suspended.

16.—A lady suffering from scirrhus of the right mamma, which had existed nearly three years, was also subjected to the electrical treatment. The disease had not only been checked in its onward progress from the time it was first discovered, by homœopathic treatment, but has been diminished in volume. The object of trying the electrical treatment was to ascertain if the electrical currents would have any effect on the hardness of the tumour. There is every reason to conclude that this effect has been produced. It seems to the writer to be worth trying, in such cases, electrical currents of such medicinal substances as may have a specific action in relation to the disease.

17.—Mrs. —, a lady of 50, became epileptic the day after her marriage, nearly thirty years ago. She had severe attacks at each time of the catamenia, at each conception, and after each parturition. She had repeated miscarriages. She came under homœopathic treatment fifteen years ago. She has since that time had three children, and no miscarriages. After two or three years the severe attacks of epilepsy ceased; but she has been subject to what she calls "pauses,"—that is, she loses her consciousness for a few seconds or minutes, but without convulsions. Obstinate constipation has been all along one of her symptoms. She had the electrical treatment for a fortnight, from Mr. Beckensteiner, and during that time she had daily and sufficient alvine relief. It is curious, but worthy of remark, that on the first application of electricity, she had an epileptic *fit, but of short* duration.

These few cases suffice to shew that Mr. Beckensteiner's method of employing electricity has been attended with excellent results.

He has used it most successfully in cases of *impuissance*, and of sterility. In nervous disorders, a very large range, he has had great success. He observes that his treatment is immediately effective in proportion as the disorder or disease is recent, and especially if the constitution has not been impaired by previous medications.

This method of electrical treatment seems to offer advantages far superior to any that have been previously tried. It may be applied with extreme gentleness. Of course in chronic cases time is needed for amelioration, and especially for cure. By this method, in such cases as may seem to require it, homœopathic remedies may be applied either topically or by diffusion through the system, and while they are administered also in the usual way.

This medical electricity is a tonic in cases of impaired vitality, of failure of the vital forces generally, and also in those where there is functional feebleness of any particular organ: and deserves to be added to the list of means homœopathists are free to use, such as the water-treatment, Ling's gymnastic therapeutics, and manual magnetism.

It is but just to say that Professor Georgii, at the suggestion it is believed of Dr. Henriques, turned his attention last year to this subject; and spent seven or eight weeks last Autumn with Mr. Beckensteiner, at Lyons, for the purpose of studying his method of practice, and observing its practical results. Professor Georgii introduced the practice into England towards the close of last year, and, on his invitation, Mr. Beckensteiner has recently paid a short visit to London, to shew his method to such medical men as might choose to enquire into it. He has published a book on the subject,* to which those are referred who may wish to obtain fuller and more exact information as to the method of treat-

* *Etudes sur l'Electricité, nouvelle methode pour son emploi Médical.* Par C. Beckensteiner.—Paris: J. B. Bailliere.

ment, than could be given in so brief and imperfect. a paper as this. It is hoped, however, that our homœopathists will think it worth their while to consider the subject, and to use it, on occasion, for their patients.

REVIEWS.

A few words on Homœopathy and Homœopathic Hospitals.—By W. T. GAIRDNER, M.D., Lecturer on the Practice of Medicine, Edinburgh.

UNDER the title at the head of this article, Dr. W. T. Gairdner has addressed to us a letter professing to be a reply to the notice of his curious "Edinburgh Essay on Homœopathy," which appeared in our last number. It has been written, obviously, for a merely local purpose, and so intently has its author bent his mind upon that alone, as to have sacrificed candour and consistency in the strangest manner imaginable; nay,—and this he will probably regret the most—to have betrayed the most extraordinary ignorance of matters known, we venture to think, to every other lecturer on medicine in the empire.

The purely local object of the publication disentitles it to any notice from us, as it would be an endless occupation to reply to every pamphleteer who is ambitious of creating a domestic or parish celebrity for himself, by appearing in print as the bold antagonist of a principle which had triumphed over the opposition of his betters; but we may once for all exhibit to our readers a specimen of the lengths to which a certain class of allopathic writers will go for their own temporary and private ends.

We are not surprised at the confused and reckless vehemence which pervades Dr. Gairdner's letter, because we felt assured that he had undertaken a task which even an able and candid man could not execute with temper and honesty. He appears

to have aimed both at maintaining a few of the false positions to which he had committed himself in the *Medical Times* in 1852, and had again taken up in his Edinburgh Essay, and also at escaping from the censure with which public opinion visits those who indulge in groundless or uncandid assertions.

It is not necessary that we should follow Dr. Gairdner through all the by-play with which he strives to divert the attention of his readers from the points really at issue; or to notice all the flippancies which are sprinkled thickly over his pages, for those who relish such impertinences would not perhaps think the less of them for our objections, while those whom they have offended would not thank us for needlessly rekindling their displeasure. We shall confine ourselves, therefore, to the principal particulars to which Dr. Gairdner has felt it necessary to advert, in his endeavour to improve his position in a controversy which he had courted without, we suspect, having read or heeded the wise caution—

> ——— Versate diu, quid ferre recusent,
> Quid valeant humeri.

Almost all the particulars we have just referred to relate to the note, on some practical points, which was appended to our review, and we cannot but regard Dr. Gairdner's eschewing a re-discussion of the scientific principles which he had attacked, as an admission of the insufficiency of his objections to them, considering that he shews no disinclination to be copious and garrulous on other points, which he seems to have thought more susceptible of the colour which he was anxious to impart. He could not indeed, with safety, be altogether silent regarding our review of his theoretical errors, but he shrinks from replying to it under the plea that it has "left him in a complete state of confusion and uncertainty" on the whole subject, and, as he says, in illustration of his dilemma, that he cannot see the difference between the terms *universal* and *general* as applied to a therapeutic law, we frankly accept his acknowledgment of defective comprehension, and are sorry that we cannot, any more than Squire Thornhill could Master Moses Primrose, supply him with argument and capacity too.

In order to execute our purpose of giving a plain and intelligible review of Dr. Gairdner's letter, we shall extricate the points we have to consider from the cónfusion in which Dr. Gairdner has thought it advisable to involve them; and in the first place, therefore, beg to remind our readers that in his previous publications he had maintained that Dr. Fleischmann's statistics of pneumonia were falsified by the enumeration of cases of acute bronchitis among those of pneumonia, so as to swell the number of the latter seemingly to 300. In his letter to us he gives up this point and takes new ground, but he gives up his former position not frankly and confessedly, not so as to let a cursory reader perceive that he has done so, and he takes the new ground so adroitly as to betray some stratagetical ability. Now, although, in all this the higher considerations of candour and fairness are sacrificed, he is not so much to be condemned as if he had actually repeated an accusation which he knew to be false, and, therefore, while we object to the manner of the movement, we cannot deny him credit for having vacated a position which he could no longer maintain without manifest dishonour.* That our readers may judge of this matter for themselves, we extract for their perusal all that Dr. Gairdner says in his letter on the subject of pneumonia.

"To the second allegation, the small mortality of severe acute diseases in the homœopathic hospital, I answered that the whole question was, *whether those diseases were really severe.* I stated that the mere names given to them was no proof of their having been severe diseases, because every one acquainted with disease knows that the names given to its different forms are, to a certain extent, arbitrary; and that it is very possible to increase or diminish the number of cases of pneumonia, pleurisy, peritonitis, pericarditis, etc., as you choose to interpret

* Dr. Gairdner assures his readers that he has not been seeking fame by this controversy, and that he had "sacrificed to the fickle goddess elsewhere." We can form no satisfactory conjecture as to what sacrifices he alludes to,—but we can hardly suppose them to have been great,—considering how much he has sacrificed in his essay and letter. If he refers to the articles he has written, or *got* to be written, in commendation of himself in a paper which has been sent us, known as the "Penny Scotsman," we admit that the sacrifices he has made for such fame as he seeks *have* been considerable.

certain symptoms and physical signs, which have a grave or a trivial significance according to the form and manner of their correlation. (?) I further stated, that the enormous and incredible number of these diseases in the homœopathic returns, was a proof to every reasonable mind that Dr. Fleischmann's mode of viewing this subject was different from the common one; that his pneumonia was not our pneumonia, his pericarditis not our pericarditis, and so on; but on the contrary, that he had swamped the cases of pneumonia, &c., as commonly so called, in a host of minor ills that flesh is heir to, and that, in virtue of certain resemblances and analogies, such as homœopathists are too fond of following out (*similia similibus*), slight diseases were made to do duty for really severe disease."

In this passage we have nothing more important than a general profession of the author's incredulity as to the diseases, pneumonia among the rest, having been really *severe;* but no attempt to shew what that incredulity is worth, or to prove that it has any better foundation than his private opinion (supposing it to have even that), and therefore we may dismiss it as of no value whatever in the question. We may remark, however, that Dr. Gairdner has an unhappy propensity to utter suspicious insinuations against the statements of those from whom he professes to differ, whether they be homœopathists or allopathists; for we find him in the *Edinburgh Medical Journal* for May last making the following pert reflection upon Professor Bennett, of Edinburgh. "Judging from his own experience, he found it difficult to understand how Dr. Bennett had accumulated so many as sixty-five cases of really acute pneumonia." Everything, according to this very modest person, ought to be adapted to the Procrustean bed of his "experience," which, as we gather from his essay and pamphlet, appears to be of strictly infinitesimal dimensions.

Again, in commenting on the testimony of his "excellent friend, Dr. Balfour, of Cramond," which was referred to in our last number as having placed beyond dispute the fact that the number of cases of pneumonia must have been, at the very least, as great as Dr. Fleischmann had stated it to be; Dr. Gairdner tacitly admits the truth of that statement, and, shifting

his ground, now merely asserts of Dr. Balfour, what he has also insinuated of Professor Bennett, that he was incapable of knowing when pneumonia was severe and when it was not. "Dr. Balfour," says he, "no doubt saw cases of pneumonia during his stay, and contracted the opinion that pneumonia was a very common disease at Vienna; but whether Dr. Fleischmann's cases of pneumonia, and of the other acute diseases so triumphantly put forward, were fair examples of the diseases in question, as commonly treated in hospitals, is another and a very different point, which Dr. Balfour was probably not well qualified to decide at the time he tried it."

It will be remembered that the proof of Dr. Fleischmann's numerical accuracy regarding his cases of pneumonia, as founded on the personal knowledge and evidence of Dr. Balfour (a prejudiced allopathist), was this:—Dr. Balfour during three months' regular attendance at Dr. Fleischmann's hospital saw 320 patients there, and among them 19 cases of pneumonia, and that too at a season of the year when pneumonia is not liable to be unusually prevalent. Now, if among 320 patients there were 19 cases of pneumonia, there should have been among the whole number of patients whose diseases are statis tically arranged in Dr. Fleischmann's report of the hospital, for a period of more than eight years, amounting in all to 6527, *more* than 300 cases of pneumonia, in fact nearly 390; so that, making every allowance for fluctuations in the proportion of pneumonias at different seasons, there cannot have been less than 300 cases of pneumonia among the hospital patients, during the period included in Dr. Fleischmann's Report. To question this obvious and conclusive inference, seems to have been too much for even Dr. Gairdner. But we cannot allow him to escape from the position which he so foolishly and ignorantly assumed, when he taxed Dr. Fleischmann with falsifying his statistics by gross numerical exaggeration in regard to pneumonia, without telling him very frankly, that by not apologising to Dr. Fleischmann, in his new publication and after his error had been clearly proved, he has forfeited all claim to the alternative offered him in our last number, and *that the* "if," which in Touchstone's philosophy of altercation

is so important, is no longer in his option. As to the new question of the *severity* of the cases of pneumonia raised by Dr. Gairdner to conceal his retreat from his former position, it would be quite as easy to unearth him from that as from the old cover, indeed, we should rather say, that earth has been stopped long ago by the analysis, given in this Journal in 1852, of Dr. Tessier's cases of pneumonia, which were treated homœopathically in the Hotel Dieu, of Paris, were cases of the usual severity, as seen in hospitals, could not possibly have been selected, and presented much the same mortality as occurred among Dr. Fleischmann's cases.

Dr. Gairdner's treatment of Dr. Balfour, in consequence of his unfortunate testimony on the subject of pneumonia in Dr. Fleischmann's hospital, is full of tragic entertainment. It reminds one of the celebrated scene in the Capitol. Dr. Balfour appears (he will pardon the comparison) as Cæsar returned triumphant and dictatorial from "foreign parts;" Dr. W. T. Gairdner enacts Brutus "with his sword and dagger;" and for the statue of Pompey we have "Phidian Jove" represented, at Dr. Gairdner's particular desire, by Dr. Fleischmann. Well, up comes Brutus and scolds his "excellent friend" Cæsar in good set terms, for the mischief he had done by his ambitious tattling, and smiting him on the tenderest part, lays him low at the feet of Phidian Fleischmann, we presume muttering between his teeth, as he falls, the usual "Et tu, Brute!" partly, (we suspect) and very pardonably, in downright Cramond.*

* Dr. Gairdner complains that pneumonia, alone, of the severe acute diseases in Fleischmann's report has been defended against his attacks. This is not true. The demonstration of the accuracy of the homœopathic returns respecting all such diseases has been made to hinge upon the vindication of pneumonia, as being numerically the most important among them, and therefore the most exposed to numerical objections. When, therefore, the most questionable among them has been completely vindicated, *a fortiori*, the rest must be held to be so too. The fact is, that but for the extreme ignorance of Dr. Gairdner, no numerical defence of pneumonia or of any of the others would have been required; for had he, in 1852, been acquainted with Dietl's publication of 1849, he would have known from the experiments of that allopathic authority that Fleischmann's numbers and mortality of pneumonia must have been correct, and he would have been saved from the folly of committing himself to assertions opposed to that clear demonstration, and the consequent

We took occasion, long ago, to express our disapproval of some of Dr. Balfour's insinuations against the manner in which Dr. Fleischmann's hospital was in some respects conducted, and we published a letter from Dr. Fleischmann which disposed of Dr. Balfour's unfair and gratuitous conjectures, so that the passage which Dr. Gairdner has quoted from Dr. Balfour, has not, as he ignorantly avers, remained uncontradicted. But while we have justly condemned Dr. Balfour for these and other indications of a biassed mind, we have never denied him the credit of having written with considerable ability and candour what he had to say from his own personal observation. Indeed, his detailed account of the cases of pneumonia which he saw under Dr. Fleischmann's care, bears internal evidence both of his accuracy as an observer, and of the serious nature of the cases; so that Dr. Gairdner is unjust to his friend when he depreciates his capacity as he does, and unjust also to those of our school who accept Dr. Balfour's testimony on the subject. In this latter particular, Dr. Gairdner betrays more even than his usual want of judgment, and by the manner in which he reflects upon homœopathists for accepting some of Dr. Balfour's statements and rejecting the rest, he exposes, we are inclined to think, the private reason of his hostility to "common sense." He thinks it strange that part only of what Dr. Balfour's letters contain should be accepted by homœopathic physicians, being unable to perceive that statements made by a prejudiced opponent, which, in spite of his bias, redound to the advantage of the principles he wishes to overturn, are incalculably more reliable than those which harmonise with his preconceptions, and are made in order to support a foregone conclusion. For example,—when Dr. Gairdner tells us that his "excellent friend" was defectively educated, and therefore ill-qualified to decide upon the comparative severity of cases of pneumonia, we receive the allegation with incredulity because it chimes in so exactly with Dr. Gairdner's obvious purposes; but when he hints his own personal experience of such a state

discredit which must pursue him all the days of his life. Dietl's name appears to be ratsbane to Dr. Gairdner, for he sedulously eschews all mention of him, and would, no doubt, play Brutus to him too if he could.

of imperfection, we credit the statement without hesitation, not on the ground that "Brutus is an honorable man," but because such an admission is very much at variance with the tone which predominates in all his writings. Again,—to give one additional illustration,—when Sir John Forbes tells us, as he does in the following passage of his new work, "that homœopathy must be at least as successful as allopathy is," we regard the admission as of much importance, and entitled to great weight from a man of his allopathic experience, because all his professional prejudices and interests must have pleaded for a very different opinion; and yet, on the other hand, we consistently reject his notion that homœopathy is a merely negative system, on the very sufficient grounds that he has had no practical experience of it, and regards it with a lively detestation quite amusing at three-score and ten. Speaking of homœopathic physicians "who have embraced its doctrines (homœopathy) from conscientious motives, and pursue its practice with the same benevolent desire to benefit their patients that actuates the followers of the ordinary system of medicine," he adds, "In numerous reports of practice published by gentlemen of this stamp, the results of treatment are stated to be favourable, and I do not think the truth of these results, as far as regards mortality, ought to be, or can be denied, whatever opinion we may entertain as to the influence working the results."

"But, independently of this evidence, we have surely a most powerful argument in favour of the admission that an average number of recoveries takes place under this system of treatment, in the fact that no public outcry has been raised against it on the score of inefficiency, and yet more, of greater mortality. If it were really true that a markedly greater amount of lingering cases, and especially of deaths, took place under this new treatment, surely the important fact would have been discovered ere this, in a field of treatment now so wide, and watched over by so alert an array of critics on every side. But I venture to say that this has not been the case." *(Nature and Art in the Cure of Disease*, p. 139.*)*

We have next to advert to the most serious transgressions of morality which are to be found, if we mistake not, in the history

of controversy. It will be remembered that in our last number an attempt which was made in the Edinburgh Essay to mislead its readers was pointed out, and characterized with much forbearance as *uncandid* and *unfair*. We quote anew the passage which called forth that condemnation, in order that Dr. Gairdner's unexampled conduct in the matter may be seen in all its enormity.

"As regards the cases of acute disease supposed to have been treated with such surprising success in the homœopathic hospitals, one fact may suffice to indicate the bias in the numerical statements. All the world over, catarrh of the chest, or bronchitis, is a very frequent disease, while pneumonia as well as pleurisy are comparatively rare. Vienna is no exception to this rule; for in the general hospitals of that city there are admitted 2078 cases of catarrh for 509 cases of pneumonia and 427 of pleurisy, In the homœopathic hospital, on the contrary, the proportion is so completely inverted, that for 300 cases of pneumonia, and 224 of pleurisy, there are only 15 of acute bronchitis mentioned, while all the other diseases of the chest together do not make up nearly the difference; thus showing clearly that every example of curable disease which could, however violently, be twisted into the semblance of pneumonia or pleurisy, was made to swell the list of these two formidable diseases, and thus to encrease the apparent success of the homœopathic experiment." (*Essay*, p. 125.)

Dr. Gairdner was accused of having in these sentences uncandidly and unfairly endeavoured to make the public believe that the 2078 cases of what are termed *catarrh* in the statistics of the general or allopathic hospital, and the 15 cases termed *acute bronchitis* in the statistics of the homœopathic hospital, were examples of one and the same disease, and of asserting that very many cases of the comparatively mild disease known as acute bronchitis, and which should have been numbered with the 15 of the homœopathic hospital, were fraudulently included among the alleged cases of the more "formidable diseases." In his pamphlet he does not attempt to defend himself from the charge of unfaithfulness preferred against him, and although *feeling* his conduct to be so in [illegible] le that he dares not

repeat the trespass of which he had been convicted, he profits so little by the humiliation to which his offence had exposed him, that in dealing with the very same particulars he actually commits what is, if possible, a still greater transgression. His second version of the matter is contained in the following extract:

"In the General Hospital of Vienna (not homœopathic) there were received in the year 1848 the large number of

21,409 cases of disease. Of these there were

1,314 tubercular phthisis;

2,078 catarrh, *including*, as Dr. Henderson will admit, bronchitis:

427 pleuritis;

509 pneumonia.

"In the Homœopathic Hospital of Vienna there was, over several years, an aggregate of

6,501 cases; and among these there were

98 phthisis;

118 catarrhs, including bronchitis, coughs, &c.;

224 pleuritis;

300 pneumonia.

"Let us throw into the list of bronchitis, if Dr. Henderson will, any reasonable proportion of the cases of influenza which he thinks unfairly excluded; still the cypher of pleuritis and pneumonia will enormously exceed the Viennese average,* as shewn in the General Hospital, whether as compared with the total number of cases, or with phthisis, or with catarrh. . . . ."

It will be perceived that in the account given above of the allopathic hospital cases, the author no longer maintains that the 2078 were cases of acute bronchitis, as he intimated to the non-medical public in his essay, and that he now limits himself to the supposition (for it is no more) that they *included* cases of that disease, while it will be remarked, on the other hand, that the 15 cases of acute bronchitis from the homœopathic

* Ignorant of statistical terms, or desirous of suggesting more than his authorities warrant, Dr. Gairdner calls that an *average* which was the accidental number for only one year of diseases subject to great numerical fluctuations!

columns disappear among "118 of catarrhs, including bronchitis, cough, &c." Our first enquiry on seeing this latter alteration was regarding Dr. Gairdner's authority for it, and we could find *none whatever* in the statistical table of Dr. Fleischmann, the only authority existing on the subject! That the reader may probe this extraordinary proceeding with us to the bottom, we give here, from Dr. Fleischmann's tables, all that is said of the diseases that admit of being classed with "bronchitis, cough, catarrh, &c.," almost all of which, if honestly dealt with, should have been included under the same general head that distinguishes the 2078 allopathic cases, viz.:

Catarrh	44 cases.
Cough	9 „
„ Chronic	130 „
„ Spasmodic . . .	18 „
Catarrhal Fever	175 „
Acute Bronchitis . . .	15 „
Influenza	52 „
	443

By no ingenuity can 118 be made by adding together, however arbitrarily, any of these numbers! The "118 of catarrhs, bronchitis, cough, &c.," is a pure (but only in the sense of unmixed) fabrication; and if not for the purpose of deception, for what purpose, we should like to know, has the statement been invented? And yet the author of this statement is the person who with so much virtuous consistency abuses his opponents as guilty of "sham and fraud!" We ask in return, who in reality utters "mendacious documents?" Who rivals now "Professor Holloway in his facts," and "Mr. Hudson in his balance-sheet?" Will the contriver of the "fraud," though not "a notable person," "retreat publicly from an untenable position, or advance over new absurdities and new blunders," and new "perversions of the truth with a clear consciousness on the part of the perverter of what he is doing."? May we not, "speaking in the name of truth and soberness, call on *Dr. Gairdner*, and on all who have abetted him,

to apologize for the base calumnies to which the healing art and its professors have for years been subjected by those who have spoken under cover of these delusive statistics?" The phrases and sentence included between the commas are copied from Dr. Gairdner (with the exception of the better name instead of which his is placed in congenial fellowship), and we ask him how he likes them, and how he will get rid of them? We received the abuse when aimed at ourselves with none of the terrors adverted to in the following lines, and we could wish the author of it no greater happiness than to be able, with equal truth, to disclaim the pleasures to which the poet also alludes.

> Falsus honor juvat, et mendax infamia terret,
> Quem, nisi mendosum et mendacem?

Having given Dr. Gairdner a taste of such treatment as is suggested by the principle *similia similibus*, we trust he will not object to the strength of the dose, or accuse us of having forsaken our principles in that particular, for we can assure him, although he will naturally think otherwise, that the dose is quite a secondary matter, almost everything depending on the suitableness of the physic. If any one else should think the dose too liberal, on the ground that we have been wrong in our diagnosis of the disease for which it has been given, and have mistaken a slight confusion or vertigo for an inveterate and loathsome malady, we beg to tell him that he is in error, and that there can be no mistake as to the disease being a real and a very bad one. It began in 1852 with exactly the same symptoms, in respect to the "catarrh, bronchitis, cough, &c." as it presents in 1857; and the delirious vociferation of bad language and false accusations has continued with little intermission ever since;—indeed, the last paroxysm has been the most violent of all.

After the revelation which has now been made of the capabilities of Dr. Gairdner, in the unhappy line which he has chosen as his path to distinction, we might be excused for dismissing him and his misdeeds without further notice, for his controversial assertions and spurious statistics can henceforth deceive

no one, and can injure no one, though they should be again obtruded upon the public with such a false show of respectability as can be acquired by a place among other essays that may be themselves respectable. Yet, since we have got so far through with our task, we may as well finish it, and take a final leave of a class of productions which covers with disgrace the sect from which it emanates.

Perhaps nothing in Dr. Gairdner's letter proves more clearly the confusion and weakness of his understanding than his use of the Canterbury statistics. Comparing them with those of the homœopathic hospital, he says the latter present "an enormous mortality (6¼ per cent.), considering that in Canterbury the hospital mortality is 2 per cent. . . . . under the ordinary methods, and, it is to be presumed, without any selection of cases." If we grant that this is not said in order to deceive unthinking general readers, but is an opinion as deliberate and sincere as its author is capable of forming, what other estimate can be entertained of his intelligence and judgment but the very lowest? The homœopathic hospital is denounced partly on the ground that by its cases of disease having been *selected*, and by such selection made to contain a smaller proportion of consumptions, heart diseases and other organic and incurable maladies, than existed in the great allopathic hospitals, its statistics, and more especially its general mortality, were a "sham and a fraud," when any comparison was made between them and the allopathic hospitals.* Such

* In 1852, when writing for medical readers in the *Medical Times*, he admits that fewer of those incurable diseases would find their way into the homœopathic hospital owing to its situation. In his essay (p. 125), written for non-medical readers, he briefly alludes to the greater number of such diseases which is found in large allopathic hospitals, "from their situation and other causes." But in his letter he drops all reference to such causes of an honest difference in the kind of cases admitted into the different hospitals, and lays dishonest selection of cases to the charge of the homœopathic hospital, as if he had changed his opinion regarding the influence of situation on the character of the cases presenting themselves for admission into hospitals, and believed that it had no effect. He can now see no cause for the difference in the character of the cases admitted into the homœopathic hospital from that of those contained in the allopathic, "but a plan by which curable cases

selection of cases is blamed as the cause of the favourable contrast presented by the general homœopathic results: and of course such reasoning implies that had there been *no* selection practised in the homœopathic hospital, its cases would have been of the same quality, with the full proportion of organic diseases, as existed in the large allopathic hospitals, and its mortality greater in proportion than it was represented actually to be. Applying this reasoning to the Canterbury Hospital, it, if its cases were not selected, must (according to Dr. Gairdner's argument) have had the same proportion of consumptions, heart and kidney diseases, &c., &c., as the great allopathic hospitals had; and with what result? A mortality of only 2 per cent.; while in precisely similar, because unselected, cases, the great allopathic hospitals had a mortality of above 12 per cent., or six times as large! What a glorification of Canterbury allopathy over the allopathy of Edinburgh and Vienna! The old bones of Thomas à Becket must have some healing virtue in them after all, and Dr. Gairdner might make a worse speculation than that of contracting to lead a new pilgrimage, at so much a head, of infirm allopathic victims, "the holy blissful martyr for to seke."

Of course, as every sensible medical man must know, the little hospital of Canterbury had that superabundance of trivial cases proper to country towns and rural populations, and could not, in the nature of things, have had the same proportion of contagious fevers and organic maladies which even the homœopathic hospital had, situated as it is on the verge of a great city; and still less could it have had nearly the proportion of such diseases as occurred in the large allopathic hospitals that exist in the centre of great cities. If the Canterbury Hospital had had the same proportion of fevers alone that existed in the homœopathic hospital, its mortality from that class of diseases singly, calculated from the ordinary rate of their mortality under allopathic treatment, would have

were chosen, and incurable ones excluded," the latter having been "curiously and suspiciously deficient," and Dr. Fleischmann having "sedulously excluded from his hospital incurable cases, except in such proportion as gave a ear of non-exclusiveness to the returns," &c., &c.

been actually greater than it is stated to have been from all the diseases it contained. But although these remarks upon the influence of situation on the nature of the cases admitted into hospitals, and consequently on their mortality, are such as all well-informed physicians know to be unquestionable, it must be quite as evident to the same class of persons, apart from all acquaintance with the special rules for the admission of patients into the Canterbury hospital, that the diseases which presented a mortality of only 10 in 500 cases (the whole number admitted in the year) must have been selected on principles that excluded all patients that appeared likely to die, or that seemed even capable of dying, of the diseases they were suffering from at the time of their application for admission. Dr. W. T. Gairdner, however, presumes that the cases were not selected, and no one can question his *presumption* who reads the following rules for the exclusion and removal of patients from the Canterbury hospital. "The following description of persons shall be held disqualified for admission as in-patients; and if inadvertently admitted, shall be discharged by the weekly board: Pregnant women; lunatics; children under seven years of age, except for operation; those subject to fits; those suspected to have venereal infections or contagious diseases; those having habitual ulcers, or consumptions, or dropsies in their last stages; those in a dying condition, or evidently incurable; those who have not had either the cow or small pox; those who are not clean in person and apparel; vagrants, or persons of bad character." Then, as to the discharge of patients, it is enacted that: "all in-patients shall be discharged who shall have been in the hospital eight weeks or upwards: unless their physicians or surgeons shall have certified, by their signatures, against the names in the adjoining columns of the 'overtime book,' that there is a prospect of benefit being derived if they shall remain a reasonable time longer in the hospital."

While such are the regulations of this boasted Canterbury hospital, that *all* contagious fevers, organic diseases, and consumptions, are peremptorily excluded, the homœopathic hospital had received no less than 1240 cases of continued and typhoid fevers, and small pox, alone; besides 98 cases of

pulmonary consumption, 71 of which, instead of being expelled in the hour of their greatest need, were humanely sheltered beneath its roof until death released them from their sufferings, and added more than a sixth to the general mortality of the hospital! The deaths in the homœopathic hospital from the four diseases just mentioned—not a case of which is admitted into the Canterbury hospital, or if accidentally admitted is allowed to remain until death discharges it—amounted to 232, or twenty five more than one-half of all the deaths! And yet Dr. Gairdner has had the folly to institute a comparison between the two hospitals in respect to mortality,—a folly doubly humiliating to him, because, by committing it, he lays himself defencelessly open to the very charges of fraudulent vaunting which he had uttered against those whom he accuses of comparing the homœopathic statistics with those of the larger allopathic hospitals; unless, indeed, we give him the benefit of the charitable conjecture, that what he has done in this matter he has done out of sheer weakness and ignorance.

Dr. Gairdner, especially in the *Medical Times* for 1852, has expended much of his abusive vocabulary on those whom he accuses of having *selected* the cases for admission into hospitals, apparently in profound ignorance that his invectives apply much more to the Gregories and Alisons of Edinburgh than to the homœopathic physicians, against whom they are specially directed. In the *Edinburgh Medical Journal* for 1843, one who knew well the customs of the Edinburgh Hospital, observes: "At one time the general practice as to admissions into the Royal Infirmary was, either to refuse most cases of manifest organic disease, or, if they were admitted, to admit them only for a short period, and then dismiss them as improper cases. Thus, almost all cases of tubercular disease of the lungs, many cases of disease of the heart, several cases of disease of the liver, and not a few cases of disease of the brain and spinal chord—as paralysis from softening, from paraplegia, &c., were refused admission altogether, or a few days only, and then dismissed as improper. mode of procedure was, that it was urged chiefly, if not exclusively, fitted for

the reception and treatment of curable cases, and every patient admitted labouring under a disease for which treatment could not, with any hope of success, be applied, was occupying the bed, and consuming those resources which were properly devoted to cases to which treatment could be beneficially administered. The result of this was, *that all cases of pulmonary consumption, diseases of the heart, and similar organic affections*, were very generally excluded from the Royal Infirmary for a long series of years." It is not a little remarkable, that at the time when the diseases distinguished by italics in the above quotation were denied accommodation in the Edinburgh Infirmary, and when that institution was reserved for "curable cases," its mortality was almost exactly the same (6 per cent.) as that of the homœopathic hospital, *one fourth of the deaths* in which occurred from those *very diseases* which *were systematically excluded* from the Edinburgh Infirmary! What cunning fellows the Edinburgh doctors were, to get up such "fraudulent statistics"! Was it not obviously done in order that Edinburgh treatment might appear immensely superior to that of other schools; Berlin, for example, where the hospital mortality at the same date was 16 per cent.; or St. Petersburgh, where it was 22? Is it not deplorably manifest from all this that the reputation of Edinburgh therapeutics rests, according to the demonstrative process of Dr. W. T. Gairdner, upon a foundation of "sham and fraud"? What a pile of "mendacious documents" have the Gregories and Alisons to answer for, unless Dr. W. T. Gairdner be a very hasty and foolish writer; an alternative to which we confess ourselves inclined by traditions and recollections honouring to the dead and to the still living.

While on the subject of general statistical results, we may point out another of the endless absurdities of Dr. Gairdner. He seems to run away with the silly notion that, when it is admitted on our part that the homœopathic and allopathic general results, as they at present stand, ought not to be compared, therefore it is also admitted that, had the allopathic hospital cases been the same in quality and in the proportion of acute and chronic diseases as the homœopathic were, there

would have been no such disproportion in the respective rates of mortality as 6 and 12 per cent. Whereas we hold it to be indisputably certain that the disproportion would be quite as great, if not greater, in such circumstances than it is at present. Had an allopath been the physician to Fleischmann's Hospital, the mortality which he would *cause* by his treatment in but six of the acute diseases—pneumonia, pleurisy, erysipelas, peritonitis, dysentery, and continued fever—as is proved by the usual allopathic mortality in those diseases, would raise the per centage of deaths from 6 to above 9; and we have no doubt that the regular rate of execution proper to allopathic means would, from the remaining diseases, furnish at least the additional 3. So that, in one view of the matter, such of our body as may have pointed with complacency to the comparative results of the different hospitals, were thoroughly justified in doing so; and, to take another view of the matter, it is quite as capable of being proved, that had homœopaths been physicians to the general allopathic hospitals, or had they treated diseases precisely such as these contained, the mortality would have been, as the special statistical evidence of acute diseases shows, very much less than it actually was. In either view, therefore, a comparison such as Dr. Gairdner avers to have been so vauntingly made on our part would be, *therapeutically* considered, by no means unwarrantable, although *pathologically* open to certain objections. But where, we ask have these vaunting comparisons been made, which Dr. Gairdner so intemperately denounces? His language on the subject is so passionately exaggerated as to amount practically to gross untruthfulness; as when he says that Fleischmann's statistics were hailed with "shouts of triumph by the homœopathists all over Europe," and that they "never hesitated to urge to the utmost, in all manner of times and places, and with every kind of hyperbolical exaggeration, these statistics against those of [illegible] medical treatment." These assertions, with whatever [illegible]y were written, are utterly false, and we challenge [illegible] them to produce so many as even two instances [illegible] much) in which the average mortality [illegible]tal has been urged against any

perusal of the report of the last amicable interlocution among the brethren of that very entertaining society of enemies, called the Edinburgh Medico-Chirurgical.* The state of the question there debated is briefly this:—Dr. Alison, among the higher authorities, had maintained that, while it was quite undeniable that bloodletting cannot now be borne (as they term it) with the same advantage or impunity as in former times, that fact is due to the circumstance that inflammatory diseases have changed their character in these degenerate days, and will not put up with behaviour on the part of doctors which they made no objection to many years ago.

Professor Bennett, again, avers that this is far from being a proper explanation of the admitted evils of bloodletting in these times; and he very decidedly, and we think rightly, ascribes them to the serious truth that bloodletting was, and must always have been in past days, as unjustifiable and injurious as it is now. This was too much for the brethren, who cannot with amiable acquiescence both accuse their fathers of having destroyed a large proportion of their patients, and deny themselves the hope of such another change in the nature of inflammations as may yet enable them to exhibit their dexterity on the median-cephalic vein, or the temporal artery. So, down upon the offending professor first comes a gentleman called Dr. Andrew Wood, and he is clearly of opinion that inflammations have changed their tune, as Dr. Alison holds; and this is his answer to his own question: "Why is it that, in the present day, venesection is so little had recourse to? for that is an undoubted fact, be the explanation what it may." And yet, in the course of his lengthy speech, he rates Professor Bennett soundly, "for rashly propounding doctrines which were not proved to be true;" passes lightly over the professor's "sixty-five cases of pneumonia with the very small mortality of three out of the whole," when bloodletting and antiphlogistics were dispensed with, and lauds Dr. Alison's ancient cases as "facts, for if these are not facts what are facts in medicine?" though they amount only to recollections and impressions, are

* Ed[illegible]

utterly indefinite as to number and proportion, and may, for aught that appears, have been escapes rather than cures.

Dr. Christison rises next, and, as was to be expected, gives his vote on the side of Dr. Alison, to wit, that inflammations are altered now-a-days, and wont abide bleeding; but he handsomely bears witness to the "great advantage that Dr. Bennett had over all his antagonists, by possessing written records of cases in hospital practice," and not mere "impressions from general recollections of cases in private practice." And so he somewhat oddly knocks over Dr. Alison and Dr. Andrew Wood.

Next starts up our old acquaintance Dr. Alexander Wood, and while he is unmasking his battery we are told—"at this stage Dr. Bennett left the room," humming to himself, as we fancy, with Lady Randolph, "Ye Woods, &c. farewell a while," and giving occasion to Dr. Alexander to exclaim, behold "he snatches up his hat and beats a hasty retreat! The foe is flown, and leaves his opponent master of the field." He further remarks in true medico-chirurgical style, and in order to deprive Dr. Bennett of all credit for the change which has come over the once gory profession, "Inquire among our country brethren, and it will be found that, in districts where the very name of Bennett is unknown, and his theories would not be comprehended, even if they had been heard of, experience, that best of all teachers, has led to the gradual abandonment of the lancet, simply because bloodletting is not now either demanded or borne as it once was."

The palaver being ended, like an assembly of North American Indians, in token of peace, they bury out of sight the instrument of death,

"cruentus
Sanguine fraterno."

And now dismissing Dr. W. T. Gairdner to the enjoyment of [illegible] peace of mind," we conclude this article with the, in some [illegible]ry of our experience in controversy,

In no instance have we yet en-
[illegible]opathy who has not, through

ignorance or wilful perversion of the truth, or both together, proved himself unfit to cope with the subject. A very few, like Sir John Forbes, have failed through the first of these defects, the rest chiefly or entirely through the moral disqualification. Ignorance of course exposes an author to speedy overthrow, but it is not less true that the other disqualification leads as certainly to a defeat still more ignominious, and quite as easy. For ourselves, we can justly say, that the moment we have detected an instance of this vice, we have felt as much at ease as to the issue of the discussion, as if the guilty author were already beneath our feet. An uncandid man, by a happy provision of nature, though he may not have that defect of memory which is proverbially dangerous to his class, is yet unable to avoid such confusion in his statements, and errors in his logic, as deliver him over an easy prey to any opponent, who confides only in the truth of his cause, and uses no weapon but the keen and tempered edge of an honest, though, it may be, an indignant, refutation.

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1. *Of Nature and Art in the Cure of Disease,* by SIR JOHN FORBES, M.D., D.C.L., F.R.S., &c. London—Churchill. 1857.

2. *Ueber die Resultate der öffentlichen homöopathischen Heilanstalt in der Leopoldstadt zu Wien,* von Dr. CARL EIGENBRODT. Giessen—Heinemann, 1854.

On the results of the public Homœopathic Hospital in Leopoldstadt, Vienna, by Dr. CHARLES EIGENBRODT. Giessen, Heinemann, 1854.

3. *Parallelen zwischen Homöopathie und Allopathie,* von Med. Dr. CASPAR, Arzt im Krankenhause der ehrw. barmherzigen Schwestern zu Wien. Wien und Olmüz,—Hölzel, 1856.

Comparison of Homœopathy and Allopathy, by Dr. CASPAR, Physician to the Hospital of the Honourable Sisters of Charity of Vienna. Vienna and Olmutz—Hölzel, 1856.

THE reader may perhaps feel some surprise at seeing at the head of this article, three works so dissimilar in title, so various

in date, and published at places so widely separated. His surprise, however, will cease when he learns that in many points there is almost an identity of views expressed in the two first works of the list, and that the last, which is intended as a reply to the second, is about the best answer that could be given to many of the statements contained in the first.

We do not intend to enter into a thorough examination of Sir John Forbes's book, the greater portion of which less concerns us homœopathists, than the heroic practitioners of the old school. Indeed, Sir John expressly states that he believes his book may be of use in strengthening confidence in nature's powers, and of "mitigating the evils of polypharmacy and of that meddlesome and perturbative practice still so predominant in this country." It is possible that it may have this effect, for by some Sir John Forbes is regarded as the impersonation of a medical philosopher, and in his long career as editor of the late *British and Foreign Medical Review*, he won golden opinions from the greater portion of the scientific medical men of the day. These, however, constitute but a fraction of the general practitioners of this country, in deprecation of whose heroic practice this beautiful little blue book has been published. In fact, no one is better aware than himself of the disesteem, we may say aversion, with which Sir John is regarded by the partisans of "the meddlesome and perturbative practice" he denounces. Such being the case, we can hardly hope that anything Sir John Forbes can write will have the effect of mitigating the evils of polypharmacy; for the philosophical spirits with whom Sir John maintains his influence have professedly abandoned the heroic system already, and the drugging routineers will not listen to anything said by one whom they have so often reviled as "a homœopathist in disguise," and whom they look upon as the greatest enemy of their class.

We shall confine ourselves on the present occasion to those portions of the book that have a direct or indirect bearing on homœopathy. In the first half of the volume is shewn how [illegible] are cured by nature alone without the assistance of art, in spite of the hindrances thrown in the way by a destructive art. This, of course, we are all sufficiently

aware of, and we only wonder that Sir John Forbes has not sought to strengthen and enforce his views by adducing some of the experiments that have been made by the partisans of the expectant system on the continent, which sufficiently prove the power of unaided nature to cure diseases that had hitherto been held to most require the assistance of art. As, however, those experiments were of a comparative kind,—the comparison being made with the ordinary and favourite remedies of the dominant school, it might have been awkward to shew by figures how infinitely superior the do-nothing system is to the most orthodox practice in the treatment of serious acute disease. So Sir John vaguely discourses of the power of unaided nature to cure acute disease, and vaguely denounces active treatment, but refrains from quoting Dietl to prove that nature cures 13 per cent. more pneumonias than either bloodletting or tartar emetic. And yet Dietl is "an honourable man," a man held in high esteem on the continent for his pathological knowledge and scientific spirit. The reasons for Sir John's reticence and vagueness is very plain. He does not go so far in his deification of the *vis medicatrix naturæ* as his continental colleagues. He wishes it still to be believed that there is an art of medicine which though "comparatively impotent to save life that would have otherwise been lost, or even beneficially to alter the character and course of diseases in a material degree" (p. 257) has yet a noble and beneficial part to play in its true character of a handmaid and helper of nature, (p. 171) and is capable of furnishing "therapeutic results greatly superior to those of homœopathy," (p. 251) and of course to those of the do-nothing system, of which he alleges homœopathy is the only pure and perfect illustration (p. 247). It might probably militate somewhat against these views to exhibit the actual results obtained by the new physiological or dietetic school in Vienna, Prague, Leipzig and elsewhere, in conjunction with those exhibited by the best or most orthodox practice in this and other countries. So Sir John contents himself with saying in a general way that such experiments "have been instituted on a small scale," "and have been already productive of large results," (p. 170), but he does not enter into further particulars concerning them.

Sir John, and Dr. Eigenbrodt agree remarkably in this, that while both give great credit to nature for her power of curing diseases, they both have a strong faith in the power of rightly directed art to do something in the way of aiding nature. But while Sir John Forbes, as we have just shewn, doubts if art can save life, Dr. Eigenbrodt has no doubts on the subject, on the contrary, he says distinctly that the physician "has it in his power to remove symptoms dangerous to life, and thus at the right moment, by therapeutic means, to save life directly."

But if Dr. Eigenbrodt is explicit in the expression of his belief in the power of art to cure disease and save life, he is vague in the extreme in his account of the means and appliances of that life-saving art; whereas Sir John Forbes, while shewing more hesitation in attributing curative powers to his art, attempts to give a full, true, and particular account of its instruments. Let us then see what these instruments of "Young Physic" are, as enumerated by its English champion.*

"The agents or instruments available by the medical art in fulfilling its objects, may be all, I think, comprehended under the following heads:

"1. Regiminal means,
"2. Physical means,
"3. Pharmaceutical means."

The regiminal means enumerated by the author need not

* By the way, we cannot compliment Sir John Forbes on an improvement in style since his elevation in rank. When he edited the *British and Foreign Medical Review* his language though rather stiff and ungenial was not otherwise objectionable, but in the present work it is often so pompous and inflated as to be absolutely ludicrous. Thus one of the symptoms of pneumonia is "a feeling of exhaustion, prompting the assumption of the horizontal position and rest." And again, we are told "one of the commonest and most imperious instincts of our nature, commands us to eschew impending suffering, and to escape from it if already inflicted; and one of reason's most immediate offices is to suggest and fabricate means in order to enable us to consummate such instinctive desires." We remember an Edinburgh hospital surgeon who was fond of "lang-nebbit" words, asking a patient, to his great discomfiture, if he had had any "borborygmus" during the night. A great many parts of Sir John's work are what we might call *borborygmoid.*

detain us. They are those available by all medical men of whatever sect. There is only one thing that strikes us oddly among the means for causing an increase of cheerfulness, and that is, "altering one's servants." In the establishments we are best acquainted with, this has not been very conducive to cheerfulness.

The physical means include bleeding; cupping; air and water baths, hot and cold; inhalation of vapours; cool drinks; electricity; galvanism; magnetism; mesmerism; hydropathy; kinesipathy. The admission of the last three agencies into Sir John's list, shew the difference between "Young Physic" and orthodoxy, which would exclude them rigorously.

The pharmaceutical means enumerated are *evacuants*; *alteratives*, ("the action of many of which is rather conjectural than demonstrable"); *balsamic remedies*, ("the special quality of some of them, to influence the action of certain mucous membranes, cannot be doubted; but there exists no positive evidence of any such power in the larger proportion of them. On the whole, they cannot be regarded as of much importance in therapeutics"); *narcotics*, ("opium and its products, some of the noblest instruments of the medical art"); *genetica*, ("only three or four drugs"); *astringents*, ("I, myself, have witnessed no unequivocal instance of their astringent action through the medium of the general circulation"); *stimulants*; *aromatics*; *tonics*; ("the majority of insignificant power as remedies, if of any power at all"); *refrigerants*, ("of very limited power, and, generally speaking, of little more power than cold water, which is indeed the best and most effective of the whole class"); *hæmatics*, ("some are of great value and of undoubted power, more especially the preparations of iron") *local* or *superficial means*, ("comprising a great variety of applications of undoubted power, such as friction, baths, cataplasms, blisters, &c.," but as with the exception of the last these are included among physical means, we do not see what business they have here).

No very flattering account of the pharmaceutical instruments of "Young Physic." To opium and its products the only *unequivocal* praise i[illegible] allays pain for a

few short hours, only to make it more unbearable afterwards; opium, which masks the symptoms, the practitioner's only true guide to the remedy; opium, which has prematurely lulled into their last sleep many thousands who might otherwise have recovered. "Sine opio nolo esse medicus" says Sydenham. Opium is the only medicine I have unequivocal faith in, says Forbes. "Hard-headed sceptic"* in everything else, Sir John believes in opium. In what affections he holds it to be curative, however, he does not inform us, and indeed as he doubts whether cures are effected at all by the medical art, we are apt to infer that the quality in opium he so admires, is its power of temporarily allaying pain, which, after all, seems to be the great aim of "Young Physic" both at home and abroad.

Sir John next proceeds (Chap. X.) to consider "the mode of action of the instruments of the medical art." He separates these instruments into two classes, *direct means* and *indirect means*. Under the head of "*Diseases directly curable*," he enumerates the following.

"1. Pain or disorder of the stomach arising from acids or alkalies swallowed intentionally or by mistake, and which may be sometimes wholly or partially neutralized by the introduction, by the mouth, of the corresponding reagent.

"2. Pain or disorder of the same organ arising from various other deleterious substances, usually named poisons, relievable or curable by the introduction of remedies (antidotes) calculated to mitigate or destroy their deleterious effects, chemically or mechanically.

"3. Certain forms of dyspepsia—in particular the affection termed cardialgia or heartburn, arising from the presence of the acescent products of imperfect digestion; relieved or removed by the neutralization of the acid by alkalies introduced by the mouth.

"4. This, and some other kinds of irritation, pain or uneasiness, arising from the contents of the stomach, relieved or [illegible] le aqueous dilution, ejection by vomiting, or carminatives, &c.

* For. Med. Rev., vol xxi, p. 247.

"5. Irritated, excited, or inflamed conditions of the stomach, rectum, &c., relieved by cold water and other refrigerants, by sedatives, &c.

"6. Certain dynamic conditions of the stomach, arising from muscular debility, or decreased sensibility, treated by stimulants and tonics acting locally.

"7. Simple constipation or fecal accumulations in the bowels, removed by purgatives and enemata.

"8. Simple diarrhœa from irritating causes of a local character, relieved by astringents and sedatives acting topically.

"9. Internal worms removed alive, or killed by the direct action of remedies of a chemical or mechanical nature; as ascarides by aloes and turpentine; tænia, &c., by cowhage, tinfilings, &c.

"10. General plethora of the system, and local and relative plethora of the heart, great vessels and lungs, relieved mechanically by general bloodletting.

"11. Local inflammations on the surface of the body, or in parts near the surface of the body, relievable by the local application of fomentations, poultices, cold lotions, leeches, cupping-glass, blisters, &c."

We may offer a few remarks in reference to these examples of "diseases directly curable."

Nos. 1 and 2 cannot be considered diseases in the strict sense of the word, nor can the chemical neutralization or mechanical removal of a poisonous substance be regarded as a cure.

The relief of heartburn by an alkali,* by dilution, or by vomiting, described in Nos. 3 and 4, so far from being a cure, is, as every one knows, a mere temporary palliative, rendering the real cure all the more difficult. The examples given in the succeeding paragraphs are [illegible] unfortunate as instances of diseases directly curable. [illegible] at the best, the effect is only temporarily [illegible] the cause remains

* It is a fact [illegible] by the re[illegible] Schmidt and Bernard, th[illegible] preternatural secretion [illegible] conditions the alkali.

untouched. A medical man who cures in this *direct* way, resembles a plumber who should content himself with mopping up the water, in place of stopping the leak in the broken cistern.

And yet Sir John tells us (p. 209) that "this direct method of treating diseases is the only method that is based on the solid principles of physical science," and he expresses a hope that the investigations of our most enlightened pathologists will gradually extend it to other diseases. Sir John expressed a similar hope some ten or eleven years ago, in his celebrated article on "Homœopathy, Allopathy, and Young Physic," but a decennium has not apparently done much towards its realization. Possibly it would be too much to expect any perceptible advance during ten years in an art which has progressed so very little during three thousand. By the way, this hopefulness that "something will turn up" for the medical art from the labours of some enlightened individual or individuals, this medical Micawberism seems to be a common delusion among our opponents. Chambers * predicts great things from the "researches of self-denying philosophers throughout Europe." Eigenbrodt asserts that the greatest activity prevails everywhere to discover medicines that shall cut short diseases (p. 17), and all are so full of expectation of some great result, that we may consider them as adherents of the "expectant" school of medicine in a sense not usually understood by the term.

Allied to *diseases directly curable* are *diseases specifically curable.* Acknowledging that the mode of action of specifics is unknown, Sir John gives the following list of diseases specifically curable.

"1. Ague and some forms of remittent fever; cured by Cinchona and its salts, and by Arsenic.

"2. Syphilis; curable by Mercury.

"3. Scorbutus; curable by fresh lemon-juice, more certainly by fresh animal and vegetable food.

[illegible]chocele; curable by Iodine.

[illegible]tic anæmia; curable by Iron.

* True Art of Healing, p. 28.

"5. Periosteal and other swellings on the surfaces of the bones—syphilitic, gouty, or strumous; cured by the iodide of Potassium.

"7. Gout: curable by Colchicum. (?)

"8. Iritis, hepatitis, pericarditis, and other inflammations of serous membranes; cured by Mercury. (?)

"9. Hemicrania and intermittent neuralgia; cured by Iron, Arsenic, Quinine, &c.

"10. Chorea; cured by Iron, Zinc, and Arsenic. (?)

"11. Delirium tremens; cured by Opium. (?)"

The interrogation points are Sir John Forbes's own. Indeed, he says, if he were only to admit into his list the diseases *generally* curable by specifics, the first half-dozen would complete it. Many of his colleagues would not allow even such a long list of specifics. Thus, Dr. Chambers * says, "Quinine and Arsenic for ague, vaccination for small pox (*sic*), iodide of Potassium for syphilis, and Sulphur for itch, is the longest list that can be made of true specifics." And even in this short list we find a discordance with that of Sir John Forbes. One says Mercury, the other iodide of Potassium, is the specific for syphilis; one holds to the idea that Sulphur is specific for itch, the other apparently knows that a handful of sand and a little lard are quite as effectual remedies. Eigenbrodt (p. 16), on the other hand, flatly denies that there are any specifics known. Who shall decide when doctors disagree?

The treatment of disease by *indirect or vicarious* action does not find much favour with Sir John. He says (p. 229), it "can be but rarely called *curative*, in the strict meaning of that term." But he proceeds to say, "this is the only kind of treatment admissible in the great body of diseases," which is equivalent to saying that the great body of diseases are not curable *by art*, whatever they may be *by nature*. He makes out four different classes of the *indirect* treatment.

His first class is the *extinguishing* or *cutting-short treatment*, which, he says, is happily going out of fashion, as it rarely succeeds, and usually aggravates the disease, or arrests

* The True Art of Healing, p. 24.

the natural restorative power. "Our estimate of this indication," says he, "as a guide in practice, and of the kind of treatment to which it leads, must therefore be entirely of a damnatory character" (p. 232). Hear that, Dr. Eigenbrodt, you who think that it is in the direction of extinguishing remedies that the medical art is to obtain its future triumphs.

Sir John's next class is *active treatment*, and his opinion of this is not much more favourable; for though he allows that it may sometimes save life which might be lost under a feebler treatment, he contends that it just as frequently destroys the patient's chance of recovery. "Its good is," he says, "at the best, neutralized by its evils" (p. 237), and, therefore, as a method of treatment, its value on the whole is = 0. In the next page he gives a still more unfavourable estimate of it: "in *rare* cases it may succeed well; but in the *majority* it not only fails to benefit, but produces actual mischief." (p. 238.)

The third class is *auxiliary* or *mild treatment—rational expectancy*. This, he says, is "at once the most philosophical, the safest, the surest, and the most successful of all the forms of indirect treatment." (p. 238.) "The indications it seeks to fulfil are chiefly the following: 1st. To place the diseased body in the most favourable circumstances for the development and exercise of its own conservative powers, by the institution of a proper regimen, in the most comprehensive sense of that term. 2nd. To endeavour thereby, or through the use of medicaments, to remove such obstacles to the favourable action of the conservative and restorative powers, as may be removeable without the risk of checking or injuriously perverting them. 3rd. Applying these measures under a watchful supervision; not to attempt, by any vigorous measures, to alter the course of the morbid processes, so long as they seem to keep within the limit of safety, and when they transgress, or threaten to transgress this limit, only then to endeavour to modify them by such mild measures as, if they fail in doing good, cannot do much harm. 4th. To be on the watch against possible contingencies, which may demand the employment of measures of exceptional activity, whether in the form of regimen or medi-

cine; and, when required, to apply such measures with the requisite vigour." (p. 239.)

This exposition of "rational expectancy" is sufficiently vague to apply to any and every variety of allopathic practice. "Such are just the principles I act up to in practice," would be the exclamation of every physician, surgeon, and apothecary in England. Every practitioner, from the most milk-and-water disciple of the do-nothing school to the fiercest champion of heroic practice, would, we doubt not, at once subscribe to the principles of "rational expectancy." Notwithstanding their difference of practice, every one professes to prescribe "a proper regimen" "to remove all obstacles to the favourable action of the conservative and restorative powers"; all would protest unanimously that if their measures "fail in doing good, they cannot do much harm"; and all would concur in the necessity of the occasional "employment of measures of exceptional activity," though they might hold very different opinions, both as to what were measures of exceptional activity, and when they were to be employed.

In a word, we may congratulate Sir John Forbes on having defined the principles of the true method of treating disease in such a felicitous manner, that while they will receive the unanimous assent of his colleagues of the old school, they will not effect the slightest alteration in the practice of any one of them.

The fourth and last class described by Sir John Forbes is *negative* or *totally inert treatment—pure expectancy—homœopathy*. He says, it is to him a *demonstrated fact*, "that the homœopathic remedies so called are utterly inert, and incapable of influencing the body, in any of its organs and functions, whether in health or disease" (p. 247). He does not know if homœopathy is inconsistent enough to adopt the regiminal practice of ordinary medicine, but if it does he considers that it may be beneficial as well as innocent, assisting nature "to the extent of the power of this its foreign auxiliary." We do not know how we are liable to the charge of inconsistency in adopting a rational and scientific regimen, while

at the same time we prescribe our medicines according to the principle of *similia similibus*. We have yet to learn that the whole duty of the physician, be he homœopathic or be he allopathic, is the giving of drugs. We have always held and taught, that it was a most important point of the physician's duty to prescribe a proper regimen for his patient, and we are at a loss to know how a rational regimen can be considered more as a "foreign auxiliary" when administered by a homœopathist than by an allopathist. That there should be any doubt on the subject is owing to the fact that our opponents persist in ignoring the fact, that homœopathy only refers to the rule for the administration of medicines, but that the physician, homœopathic as well as allopathic, has other things to do for his patient, besides making him swallow drugs. No one knows this better than Sir John Forbes, who says (p. 199), "according to the vulgar notion, the function of the physician consists in little else than the prescription or administration of drugs, and the function of the patient in little else than swallowing them," and he adds, that these views are "degrading and unjust." We think so too; and every writer on homœopathy, from Hahnemann downwards, has insisted on the importance of a proper regimen. We marvel very much at Sir John Forbes's profession of ignorance on this point, when it is notorious that almost every writer against homœopathy has attributed the success of homœopathic practitioners to the excellence of their regiminal rules. In fact in the very next page (p. 250), Sir John speaks of homœopathy as one of the forms of regiminal treatment. And here he acknowledges that it may be more successful in the treatment of *acute diseases* than the more heroic modes of ordinary practice; but that in *chronic diseases* its inferiority to the best form of our ordinary combined medicinal and regiminal treatment is very manifest.

This admission, like every other statement in Sir John's book, is sufficiently vague. It amounts to this, and no more: "Homœopathy is better than bad allopathy in acute diseases, but worse than good allopathy in chronic diseases." Hitherto the only triumphs our opponents have conceded to us are in chronic diseases, but we have always been denounced as power-

less before acute disease. Now the tables are turned; in the face of the statistics of homœopathic hospitals, it would not have done to say that homœopathy is worse than allopathy in acute diseases, so it is now admitted to be better than bad allopathy. Chronic diseases are now the field selected by the allopathist for his comparisons with homœopathy, and as in the present state of things a comparison between the allopathic and homœopathic treatment of chronic diseases is rather a difficult matter, Sir John is pretty sure of not being driven from this, his stronghold, by hospital statistics. Now we are not at all disposed to accept Sir John's estimate of the power of homœopathic treatment either in acute or in chronic disease, nor yet in comparison with either good or bad allopathy. We are prepared to defend a very different proposition than that laid down by our opponent, viz., that "homœopathy is better than the best allopathy in both acute and chronic disease;" in other words, homœopathy has a positive and real power of curing both acute and chronic disease, and that to a far greater extent than is possessed by allopathy or any regiminal treatment whatsoever.

With respect to chronic diseases our evidence, though to our own mind quite convincing, is not so conclusive to one unacquainted with homœopathy by practice, as the statistical evidence that can be adduced relative to acute diseases. When Hahnemann (*vide Lesser Writings*,) first proposed the homœopathic employment of medicines, he only alluded to their use in chronic diseases, and it was not until some years later that he found the rule applicable to acute diseases. If the records of homœopathic clinical experience are searched it will be found that a great majority of the chronic diseases therein recorded as cured, had previously been for a longer or shorter time under allopathic treatment. We have no hesitation in saying that it is the cure of chronic diseases of long standing, many of which had been fruitlessly treated by allopathy, and had resorted to homœopathy as a dernier ressort, which has gained and still gains for homœopathy its greatest number of converts; and every homœopathist feels that it is in the treatment of such diseases that he has the most unequivocal grounds, as far as his own experience can afford such, for his belief in the truth of the homœopathic law.

As regards the treatment of acute disease the individual experience of a practitioner can rarely furnish him with data sufficient to institute comparisons with other methods of treatment. Acute diseases recover under all treatments, and without any treatment at all, and the relative value of methods of cure in them cannot be well ascertained by the units and tens of private practice, but only by the hundreds and thousands of hospital experience. But a few cases of chronic disease whose natural termination is not in recovery, and which have been treated for months or years by the most enlightened practitioners by allopathy, if cured by a homœopathic practitioner, *cito, tuto et jucunde,* are the strongest evidence to himself of the value of the system he pursues.

But as almost any amount of evidence of this private and individual character would be rejected by our opponents, we must leave it to time to vindicate the superiority of homœopathy in chronic diseases, and we have every confidence that that test of truth will reverse the judgment of Sir John Forbes and confirm our assertion that homœopathy cures chronic diseases better than the best allopathy.

With respect to acute diseases we have already sufficient data to prove the superiority of homœopathy over not only the "more heroic modes of ordinary practice," which Sir John allows it to possess, but over every variety of allopathic practice, from the most heroic to the most expectant.

These data exist passim throughout our homœopathic literature, and are brought out prominently by every allopathic attack on us. We do not intend to repeat what has already been adduced on this subject in this Journal and elsewhere. We would only avail ourselves of the recent controversy between Drs. Eigenbrodt and Caspar, to exhibit another triumphant vindication of homœopathy at the hands of its latest defender.

The impartial reader who shall carefully peruse the overwhelming evidence adduced by Dr. Caspar, will be in a position to judge if homœopathy deserves the harsh epithets bestowed on it by Sir John Forbes. Forgetting, perhaps regretting, the courtesy of his style when speaking of homœopathy ten years since, Sir John now makes use of language towards it more

indicative of peevishness and irritation than of that philosophical spirit displayed by him in the former controversy. We present the reader with a few specimens of the language, which after at least ten years of reflection Sir John thinks fit to apply to homœopathy: "utterly absurd and useless" (p. 12); "one of the greatest and most singular delusions that has ever been entertained by professors of the healing art" (p. 162); "pseudo-specific treatment of the lowest and worst kind" (p. 248); "a system so utterly false and despicable" (p. 250). Perhaps as a set-off to the above we ought to quote a little bit of complimentary language he applies to us: "it cannot be denied that there are among homœopathists men who have embraced its doctrines from conscientious motives, and pursue its practice with the same benevolent desire to benefit their patients that actuates the followers of the ordinary system of medicine" (p. 159.)

We think we shall be able most succinctly and clearly to lay before the reader the chief points of interest in the Eigenbrodt-Caspar controversy, by giving the attack and reply in the form of a dialogue. The advantage of this will be that the reader will find the arguments and facts pro and con in juxtaposition, and he will thereby be in a better position for judging on which side the best of the argument is. Without using the exact language of the disputants we shall give the substance of every material point discussed between them, nor shall we allow our zeal for what we hold to be the truth to weaken the force of the allopathist's arguments or exaggerate the counter-statements of his opponent.

Dramatis Personæ.

DR. CARL EIGENBRODT, a young military doctor of Darmstadt, commissioned by his government to enquire into the results of the homœopathic practice in the Vienna homœopathic hospitals.

DR. CASPAR, assistant physician to the homœopathic hospital of the Sisters of Charity in the Leopoldstadt, Vienna.

EIGENBRODT *loquitur*. Having in 1852 been commissioned by the war-ministry of my native country to enquire into the treatment pursued in the homœopathic establishments of Vienna,

I preferred making my investigations in the hospital presided over by Drs. Wurmb and Caspar. My reasons for so doing were partly because a friend who had been converted to homœopathy by Dr. Wurmb gave me a most flattering account of the success of the treatment at the Leopoldstadt hospital, and partly because the physicians of that hospital had published what appeared a very fair and faithful account of their experience during one whole year* (1850). I am much indebted to these gentlemen for the assistance they rendered me in my researches, and although compelled to differ from them on several points, I must acknowledge my belief that they are animated by an honest desire for truth. The remarks I am about to make are founded partly on my own observations during my attendance at the hospital, but principally on the records of the treatment pursued, furnished by the physicians themselves in the work alluded to.

The hospital in the Leopoldstadt contains forty beds in two wards, one for males the other for females. The physicians are Dr. Wurmb and his assistant Dr. Caspar. The arrangements of the hospital as to bed-furniture, &c., are excellent. The diet is also excellent as to quality and unlimited as to quantity. Anything the physicians may prescribe is at once supplied. In this respect this hospital enjoys a great advantage over the other hospitals of Vienna. The nurses are the sisters of Charity to whom the hospital belongs, and their zeal and conscientiousness in fulfilling their duties are admirable. The medicines used are prepared and dispensed by the sisters. The crude medicines are supplied from an allopathic laboratory. The doses employed were almost exclusively the 30th dilution, prepared according to the decimal scale. We, who do not believe in homœopathy, of course cannot allow that there remains any medicine in the 30th dilution, and therefore we hold that the patients got no medicine at all. The average number of patients in the hospital is from 25 to 30, whilst the number of beds is 40. About two thirds of these are females, generally maid-servants from 18 to 20 years of age, chiefly from the country, and of robust con-

* *Homöopathische-Klinische Studien.* A translation of this work has appeared at intervals in former numbers of this Journal.

stitutions. Thus the inmates of this hospital are of a very different class from those in the general hospital of Vienna, for in the latter we find the sick criminals drawn from the lowest dregs of the populace, and it is in fact the poorest classes of the city, in whom poverty, misery, and ruined constitutions are almost constantly met with, who constitute the greater majority of the patients. In the tabular list of the report for 1850 (*Studien*) it is stated that 727 patients were treated during the year. Of them 567 are stated to have been cured, 86 relieved, 2 transferred, 42 died, and 30 remained under treatment. There are besides 3 deaths under the head of admitted moribund. Total number 730, of whom 250 men, 480 women. Besides these there are 156 cases of cholera with 58 deaths not included in the above list.

CASPAR.—The picture you have drawn of our hospital is too favourable. The order of the Sisters of Charity is poor, its income is derived from alms, which, in consequence of the prevalent distress, come in but sparingly, and therefore, only what is absolutely necessary can be supplied to the patients. Hence, as regards diet, the physician is much more limited than in the General Hospital. The wards are certainly not better than in that institution, one of them is, on the contrary, much worse, as it is in close proximity to an ice pit, and has a northern exposure; it is in immediate connexion with the privy, and is floored with stone flags. Moreover, in consequence of the confined space, and the great afflux of patients, the ward is very often too full. It is quite true that very old persons suffering from chronic or incurable diseases are rarely admitted. The following is a statement of the ages of the patients admitted in 1850:—

Betwixt	1	and	10	years of age,	16	patients.
„	11	„	20	„	181	„
„	21	„	30	„	341	„
„	31	„	40	„	114	„
„	41	„	50	„	45	„
„	51	„	60	„	19	„
„	61		and upwards,		11	„
			Total		727	

From this it will be observed that the proportional number of ages up to 50 is much the same as in other institutions, and your statement that the majority of the patients were from 18 to 20 years of age is incorrect. There is no lack of persons from the poorest class among our patients, indeed, they probably are in greater proportion than in the General Hospital. In the latter all the trades' unions and corporations have beds for their members, and a considerable number of patients of the better class are received in the paying wards, whereas the male patients in our hospital belong almost exclusively to the very poorest classes of society.*

E.—In Dr. Wurmb's report there are 89 cases designated as typhus (*nervenfieber*), of whom 75 recovered, 9 died, and 5 remained in hospital. Such a proportion of recoveries would be astonishingly large, were the cases real typhus, as we understand it in our military hospitals; but a number of quite different diseases are included under this head, such as gastric fever, rheumatic fever, and even catarrhal fever. It is usual with us to confine the designation typhus fever to such cases as are acccompanied by enlargement of the spleen. Dr. Wurmb certainly made a show of ascertaining this pathognomonic sign before establishing his diagnosis; but there is great difficulty in ascertaining inconsiderable enlargements of the spleen, and

* We pass over Eigenbrodt's attack on, and Caspar's defence of, the general mortality of the homœopathic hospital, as that would necessitate greater details than we can afford space for. The gross mortality of two different hospitals could not prove much one way or another, unless the cases treated were nearly the same in both. Caspar has rightly appreciated this, and accordingly he has endeavoured to assimilate the character of the cases received in both hospitals. This he does by deducting from the comparison all those diseases which occurred rarely or never in the homœopathic hospital. In the absence of similarity of cases received this was the only plan he could pursue. Comparing then the mortality of the homœopathic with that of the General Hospital of Vienna, with these necessary deductions, he finds that while in the former the gross mortality was 5·3 per cent., in the latter it was as high as 18·5 per cent. He furnishes other comparisons equally favourable to the homœopathic treatment; but as to these we shall not follow him, as we hold gross results of hospital treatment to be too vague for practical purposes. They only prove that, on the whole, one treatment is better or worse than another, but they leave no lasting impression on the scientific mind.

I doubt Dr. Wurmb's proficiency in the art of physical diagnosis.

C.—Your sneer at Dr. Wurmb's diagnostic ability is not justified by the facts. Dr. Wurmb is well-known as a man who has always maintained himself in the foremost ranks of science, and who successfully cultivated and wrote upon the most improved modes of physical diagnosis, before they were known to most physicians, even by name, and before you yourself had left school. Dr. Wurmb, in his classification of typhus, has followed the views of the most eminent writers on the subject, among whom I may mention Chomel, Grisolle, Hamernjk, &c. The diseases he has put down as typhus are what would be similarly designated in most allopathic hospitals, and as our object is a comparison of our treatment with the allopathic, any other designation of these cases would have been inadmissible.

E.—A statistical comparison of Wurmb's cases of typhus with its treatment in other hospitals does not show favourably for the homœopathic treatment. Of these 89 cases we learn that 11 died (2 of the 5 designated as remaining having died). This is 1 death in 8 cases, or 12½ per cent. In 1848 the mortality in typhus in the General Hospital of Vienna was 18·9 per cent., and the worst and most dangerous forms of disease are included under this rubric. In the so-called hunger-typhus epidemic in Silesia, in 1848, Dr. Suchanik treated 778 cases of this disease, and lost only 56 ($7\ ^{77}/_{389}$ per cent.). Dr. Jaquez had even better results; for he tells us he lost only $6\ ^{22}/_{313}$ per cent. In the military hospital at Prague only 16 died out of 171 cases of typhus; 62 of these were slight cases, and are termed gastric fever. If we leave out the numbers "remaining" on each side, we find that the mortality in the Prague hospital was but $10^{10}/_{139}$ per cent., whereas that in Wurmb's hospital was $10\ ^{5}/_{7}$ per cent. And yet the cases were less favourable in the Prague hospital, for it is a well-known fact that the greatest mortality in this disease occurs among robust men who have been exposed to deprivations and excesses, and such must have been the case with most of those admitted to the Prague hospital.

C.—The comparison you institute betwixt the treatment of typhus at our hospital and the allopathic treatment of certain epidemics of typhus in other hospitals, other localities, and other years, is most unfair. It is well known that the character and severity of epidemics generally, and of typhus in particular, vary very much, in different places, and in the same place at different times, so that the very same treatment is often followed by very different results. It is very improbable that Dr. Suchanik's *hunger-typhus* bore any resemblance to the disease that prevails at Vienna. With regard to the treatment of typhus in the military hospital at Prague, it is no doubt true that men are more apt to take typhus than women, but all hospital statistics shew that the per centage of deaths among typhus patients is greater in the female sex than in the male. In our hospital the greatest number of patients are females. As regards the great fatigue and excesses to which you allege the Prague patients were exposed, it is absurd to talk of such in reference to the soldiers in 1844, for their life in that year was as quiet and easy as possible. Our patients, the daily labourers, maids of all work, and poor working people, of whom they are chiefly composed, might with more reason complain of their fatiguing work than your soldiers. In your calculation of the mortality of the Prague hospital, you have included 62 cases of *gastric fever*, which in our list are enumerated under the head of *acute gastro-intestinal catarrh.* If, therefore, you exclude these cases from the Prague report, you will find the mortality 14·6 per cent., therefore 4·5 per cent. more than ours. Or, if among our numbers you include our cases of gastric fever, our mortality will be only 7 per cent., that is, 2·3 less than in the Prague cases. In the Vienna general allopathic hospital the diagnosis of typhus is exactly the same as ours, and as this disease, as a rule, attacks young and robust persons, we may safely institute a comparison between the results of our treatment and that of the General Hospital. The comparison shews us the following:

In the Vienna General Hospital there were—

	Cases received.	Died.	Remained.	Mortality.
In 1850	920	144	48	16·5 %
„ 1852	616	133	125	27·0 %
„ 1853	1206	259	87	23·1 %

In the Homœopathic Hospital there were—

	Cases received.	Died.	Remained.	Mortality.
In 1850	89	9	8	10·7 %
„ 1851	88	10	8	12·5 %
„ 1852	137	11	16	9·0 %

You may perhaps imagine that we reckon as typhus, cases which would not be so designated in the General Hospital. The only disease that can be confounded with typhus, is acute gastro-intestinal catarrh. Let us throw the two diseases together, and compare.

In the General Hospital there were—

	Typhus.	Catarrh.	Total.	Died.	Remained.	Mort.
In 1850, admitted	920	1073	1993	176	?	8·8 %
„ 1852, „	616	1082	1698	180	163	11·7 %
„ 1853, „	1206	1052	2258	273	118	12·7 %

In the homœopathic hospital during the years 1850-1-2, 314 cases of typhus and 141 of gastro-intestinal catarrh were received; total 455. Of these, 30 died, and 17 remained; hence the mortality was only 6·9 per cent.

But you may think that our proportion of catarrhs was greater than that in the General Hospital. On the contrary, while the proportion of catarrhs to the other cases in the General hospital was 8·5 per cent., in our hospital it was only 6·6 per cent.

As you insist that homœopathic is pure expectant treatment, let us compare our results in the treatment of fever with those of a hospital in which the expectant treatment is carried out strictly. Such a hospital is the second medical division in Prague, and in this hospital we know that the diagnosis of typhus *is exactly* the same as ours. We find then in this hospital—

	Cases received.	Died.	Remained.	Mortality.
In 1849	139	27	7	20·4 %
„ 1850	98	13	2	13·5 %
Total	237	40	9	17·0 %

Thus our success in typhus is 7 per cent. better than this purely expectant treatment.

E.—I shall proceed to shew that the vaunted success of homœopathy in the treatment of pneumonia is a mere delusion. Wurmb compares his results with those of the allopathic treatment by means of remedies intended to cut short the disease, as bloodletting, &c., but the new physiological school has demonstrated that such violent means are only injurious, and therefore we shall compare his results with those of the expectant plan, over which I shall show that they have no superiority. Dr. Wurmb's own cases being small in number, he adduces for the purposes of comparison the cases treated at the homœopathic hospital in Gumpendorf, where according to the report published by Fleischmann, 284 cases of pneumonia were treated from 1844 to 1848, and only 10 of these died. But I cannot admit these statements as reliable examples. For in Fleischmann's report he gives merely figures and no details, so that we cannot be assured that the cases are what they are called; and as I very much doubt Fleischmann's diagnostic skill,* I cannot take his word for the cases being all pneumonia. The same objections I make to the statistics of pneumonia from Dr. Reiss' homœopathic hospital at Linz, where 99 cases of pneumonia are said to have been treated with only 1 death. Wurmb's being the only cases where the details of the disease are given, can alone admit of comparison with those of Dietl, whose treatment was purely expectant in respect to 189 patients, of whom 14 died. In Dr. Wurmb's list, however, none of these deaths would have come under the head of pneumonia, as in them the pneumonia was complicated with other diseases, and therefore Dr. Wurmb would have placed them in another

* Hitherto even his bitterest opponents have allowed Fleischmann to be a proficient in physical diagnosis.

category. All these deaths, with one exception, occurred in patients above forty years of age; 8 were between sixty and eighty. If then we deduct the complicated pneumonias from Dietl's cases, we find that all the cases treated by him were cured. As it was, with the complicated cases, Dietl's mortality was only 7 per cent., whereas, if we add the complicated cases to Wurmb's list, we find that his total number was 26 (in place of 19), and the deaths 3 (in place of none). I should observe that 4 of those complications were chronic catarrh, and 3 pleuritic exudation, and that in ordinary statistical tables such complications, on account of their frequency, are usually not reckoned as complications, but included among the uncomplicated cases. Dr. Wurmb's mortality in the treatment of pneumonia was therefore $11^{7}/_{13}$ per cent. Of Wurmb's cases of uncomplicated pneumonia the oldest was fifty years of age; the greater number were between twenty and forty years old. In 14 of these one lung only was engorged, in 5 both lungs. Of his 7 complicated cases there were only 2 above sixty years of age. Of the 4 of these cases that recovered only one lung was affected. So that in place of Dietl having failed to do justice to the homœopathic method, by saying that its results were precisely the same as his expectant or dietetic method, we find that it is not nearly so successful as the latter.

But let us compare Wurmb's results with those of other non-homœopathic modes of treatment. Dr. Varrentrapp treated at the Holy Ghost Hospital, Frankfort-on-Main, 23 pneumonias with chloroform inhalation, and lost but 1 case. Of these, 7 cases were complicated with pleuritic exudation; and 1 with the drunkard's dyscrasia. In 5 cases both lungs were affected. The patient's ages were from 19 to 62 years. The mortality was $4^{6}/_{23}$ per cent. Professor Baumgärtner, of Freiburg, treated upwards of 30 cases of pneumonia with æther and chloroform inhalations, and lost 3. The deaths were a mason 56 years old, and two poor old women of 71 and 55 years of age. Of the cases that recovered, 2 were remarkable for their gravity and complications. Dr. Helbing, of Emmendingen, employed venesection and chloroform inhalations in 62 cases of pneumonia, and lost 5. Dr. Wucherer treated 14 private and 76

military hospital patients on Baumgärtner's plan, and only lost 1, who had emphysema. The total mortality of all the cases was only $4^1/_3$ per cent. Dr. Wucherer's mortality was only $1^1/_9$ per cent. In the garrison hospital of Prague, only 1 case died out of 55, giving a mortality of $1^9/_{11}$ per cent. But the patients in a military hospital do not admit of comparison, with respect to pneumonia, with those in an ordinary hospital, as age has so much to do with the mortality. Therefore I shall abide by my comparison with Dietl's cases, which occurred in a civil hospital. Wurmb is quite wrong in imagining that the pneumonias are much more rapidly cured under homœopathic treatment than they are under the old system. The average duration of his cases was 16 days, but that of Dr. Wucherer's cases was only 15·8 days, and that of Dr. Helbing's 15·6 days,

C.—True, in the *Studien* we did separate the complicated from the uncomplicated cases, but as that plan has some inconveniences, we shall consider them together as you propose. But, first, I would observe that you have included in our fatal cases, one which we expressly stated came to us only after having been subjected to copious venesection, whereby it was reduced to a state of complete anæmia and pyæmia, and was thereby already in a hopeless state. You may reckon its death to one of your non-homœopathic methods, it certainly cannot be held to be a specimen of homœopathic treatment. Deducting this case, then our mortality amounts to 2 out of 25 cases—8 per cent., and not $11^7/_{13}$ per cent. as you make out. Although these numbers are much too small to found any opinion on, still I am prepared to abide by them in the comparison with other methods. The treatment by chloroform inhalations is not a fair subject of comparison with ours, for the experimenters selected the cases for their experiments. Moreover, it is now generally allowed that chloroform inhalation has no effect whatever on the course or mortality of pneumonia, so that its very partisans have abandoned it. Still let us examine these cases,

Dr. Varrentrapp,	out of	23	cases lost	1,	mortality	$4^6/_{23}$	per cent.
Dr. Baumgärtner,	„	30	„ „	3,	„	10	„
Dr. Helbing, who employed venesection also	„	62	„ „	5,	„	8	„
Dr. Wucherer,	„	90	„ „	1,	„	1·1	„

Here is a mortality ranging from 1·1 to 10 per cent! Moreover, we find that Dr. Helbing who used bloodletting at the same time lost 8 per cent., whereas, Dr. Baumgärtner who did not make use of that means, which the new school, you assert, has demonstrated to be positively injurious, lost 10 per cent. It is quite clear that the chloroform had nothing to do either with the good or bad result in these cases, and there is no doubt, if the particulars of these cases could be had, they would be found to be of such a character as to be unsuitable for a comparison with ours.

The objections we might have to these cases do not apply to those of Dr. Dietl, I shall therefore enter more minutely on a comparison of our treatment with the results he has recorded. As since 1848, when the cases to which you refer were published, Dr. Dietl has given to the world an account of his practice on a still more extensive scale, I shall compare the whole of his cases with all that have been treated in our hospital from 1850 to 1852 inclusive, which will give us larger numbers to deal with.

In the years alluded to, we treated 92 cases of pneumonia,—43 males and 49 females. Of these, together, their died 6 = 6·5 per cent.

As regards age, there were—

From 1 to 30 years,	61 cases,	=	66	per cent.
„ 31 to 50 „	21 „	„	23	„
„ 51 to 70 „	10 „	„	11	„

Dr. Dietl treated 750 cases of pneumonia,—412 males, 338 females. Of these, together, there died 69 = 9·2 per cent.

As regards age, there were—

From 1 to 30 years,	329 cases,	=	44	per cent.
„ 31 to 50 „	256 „	„	34	„
„ 51 to 70 „	143 „	„	19	„
„ 70 upwards	22 „	„	3	„

This gives to our treatment an advantage over that of Dietl of 2·7 per cent. fewer deaths.

Dr. Dietl had 389 complications of greater or less severity, = 52 per cent. of all the cases.

We had 61 complications = 66 per cent. To shew that they were not trivial, I will enumerate them.

Pleurisy	14
Intestinal catarrh	12
Chronic pulmonary and emphyzema	10
Tuberculosis	3
Inflammation of larynx and trachea	2
Senile weakness	2
Chronic splenic tumour	2
Intermittent fever	2
Delirium tremens	1
Drunkard's dyscrasia	1
Gangrene of lungs	1
Hæmoptysis	1
Anæmia	1
Scorbutus	1
Encephalitis	1
Aneurism	1
Deformity	1
Jaundice	1
Convulsions	1
Chlorosis	1
Epilepsy	1
Bright's disease	1
	61

Owing to our small numbers, one death bears a proportion of 1·08 per cent. to the whole number, whereas, in Dietl's larger numbers it requires 8 deaths to have the same result. One of our cases died 8 hours, and another 24 hours after admission. As it is possible, though not probable, that a similar proportion of such cases occurred among Dietl's, I have not thought it right to omit those two deaths, which add so much to the percentage of our mortality. It would require larger numbers on our part to settle this point.

There is another point connected with Dr. Dietl's statistics that I allude to very unwillingly; and that is the doubt that has been expressed by some of his opponents relative to their correctness. The hospital where he practised in Vienna is in every way very similar to the General Hospital. In the latter, venesection is almost as seldom used, and the therapeutic treatment is as nearly as possible the same. A still greater resemblance to Dr. Dietl's practice is found in the Prague Hospital, where the expectant method is carried out to the greatest extent. How, then, does it happen that the statistics of the treatment of pneumonia in these institutions shew such a different mortality from that obtained by Dr Dietl? I give them here:

In the Vienna Hospital there were,

In 1850,	received 472,	of these 92 died,	= 19·5	per cent.
„ 1852,	„ 662,	„ 148 „	„ 22·3	„
„ 1853,	„ 466,	„ 110 „	„ 23·2	„

In the 2nd division of the Prague Hospital there were,

In 1848-49,	received 197,	of these 36 died,	= 18·2	per cent.
„ 1850	„ 62,	„ 22 „	„ 35·4	„

In the Pulmonary division at Prague there were,

In 1848-49, received 160, of these 29 died, = 18·1 per cent.

The enormous difference between these results and those obtained by Dr. Dietl, with an almost identical therapeutic treatment, requires some explanation, and until it is given, we can scarcely be expected to accept Dietl's statistics as giving an unexceptionable standard for judging of the value of the dietetic or expectant treatment of pneumonia.

Of the statistics I have cited, I am sorry that those of the Prague Hospital for 1850 alone are given in sufficient detail to allow of a comparison with ours. I shall now make that comparison by means of tables.

In the 2nd medical division in Prague.

Age	Cases received.	Recovery took place between the			Death occurred between the			Mortality per cent.
		1st and 10th day	10th and 20th day	20th and 30th day	1st and 10th day	10th and 20th day	20th and 30th day	
1 to 10	1	..	..	1	..	..	..	..
10 to 20	4	..	3	1	..	..	..	..
20 to 30	8	..	7	..	..	1	..	12·5
30 to 40	5	..	3	1	..	1	..	20·9
40 to 50	12	..	6	1	3	2	..	40·6
50 to 60	10	..	4	2	1	3	..	40·6
60 to 70	15	..	6	3	1	1	4	40·0
70 to 80	4	..	..	2	1	1	..	50·0
80	3	..	..	..	..	3	..	100·0
Total	62	..	29	11	6	12	4	35·4

In the Homœopathic Hospital.

Age	Cases received.	Recovery took place between the			Death occurred between the			Mortality per cent.
		1st and 10th day	10th and 20th day	After 20th day	1st and 10th day	10th and 20th day	20th and 30th day	
1 to 10	4	2	..	1	..	1	..	14·3
10 to 20	29	3	23	3	..	..	..	..
20 to 30	28	4	14	10	..	..	..	..
30 to 40	11	2	4	4	1	..	.	9·0
40 to 50	10	..	8	2	..	..	..	..
50 to 60	4	..	1	2	..	..	1	20.0
60 to 70	6	..	2	1	3	..	..	50·0
Total	92	11	52	23	4	1	1	6·5

Now, although the ages in the Prague hospital were much more unfavourable than ours, still it will be seen from the above tables that our percentage of recovery was generally very much more favourable in each decennial period. Moreover, it will be observed that the rapidity of the recovery was much greater in our hospital than in the Prague hospital.

With regard to the extent of the pneumonia, I find that in the Prague hospital the disease was limited to one lung in 50

cases, of whom 16 died, = 32 per cent., it affected both lungs in 12 cases, of whom 6 died, = 50 per cent.

In our hospital we had 77 single, and 15 double pneumonias; of the former there died 3, = 3 per cent., of the latter also 3, = 20 per cent.

It will thus be evident that in every way the results obtained by homœopathy were very greatly superior.*

* We pass over the discussion on the treatment of cholera. Dr. Eigenbrodt, utterly forgetful of the exigences of a scientific consideration of the matter, compares the results obtained in the homœopathic hospital, with sundry reports gathered from various periodicals, of the result said to have been obtained, in private practice chiefly, by various practitioners in Trieste, Berlin, Hull, London, any where, in fact, but in Vienna. Now, when it is known how different the intensity of the cholera is in different places, at different periods of the disease, in different classes of society, &c., and how much greater the mortality usually is in hospitals than in private practice, it is evident that to act as Eigenbrodt does, is to abandon altogether scientific discussion, and to resort to mere pettifogging quibbles in order to get up the semblance of a case against homœopathy. Dr. Caspar brings back the discussion within its legitimate bounds, and shews by a series of statistical tables that the homœopathic treatment was infinitely more successful in every way in the treatment of cholera, when compared with allopathic treatment under similar circumstances. We shall likewise pass over the discussion Eigenbrodt raises with respect to the homœopathic treatment of incurable diseases; the chief point in which is his reference to the famous case of Marshal Radetzky, and his utter perversion of the facts connected with it. Caspar, as usual, sets him right here. The discussion upon intermittent fever which Dr. Eigenbrodt next raises, offers not sufficient interest to detain us. We recommend our readers to peruse what Wurmb and Caspar said on that subject in their *Studien* (*Vide* this Journal, vol. XIII, p. 419). Eigenbrodt makes no comparison of the homœopathic with that of any allopathic hospital, so that we have no opportunity of comparing the relative success of the two treatments. It is, in fact, a very difficult disease for comparison, for, as it partakes more of the nature of a chronic disease than of an acute, in order to come to a just idea of the relative success of the two treatments, it would be requisite to follow the cases for a long time after their dismissal from hospital to ascertain if the cure was permanent, or if it merely consisted in a suppression of the fits, which either returned after a time, or the malady took a new phase. We omit the controversy raised by Dr. Eigenbrodt relative to the treatment of delirium tremens, chlorosis, tape-worm, cutaneous diseases, and syphilis, because so few of these cases occurred in Wurmb and Caspar's hospital, that they could form no data for a comparison with other treatment. Indeed, of syphilis no case occurred, and Eigenbrodt adduces the testimony of that very

E.—I admit that homœopathy has made a considerable number of converts amongst both medical and non-medical persons; but I believe the chief reasons why it has done so are, the abuse of drugs by practitioners of the old school, and a certain mysterious nimbus of secresy that envelopes it. But though I consider it utterly false and illusory, I would not, on that account, endeavour to suppress it, or persecute its partisans in any way. Experience shows that the more freedom has been accorded to homœopathy the less it has been able to obtain proselytes. Thus, since chairs of homœopathy have been founded in Vienna and Prague, homœopathy has constantly decreased in public estimation. Publicity, in fact, appears to be fatal to the spread of homœopathy.

C.—I will not deny that homœopathy is indebted for part of its rapid progress to the fearful abuse that has been and still is made of drugs in your school. But I utterly deny that homœopathy has ever affected any mystery or secresy; on the contrary, the labours of many of its partisans have been directed to popularize a knowledge of it. I also deny that it has lost by the recent favour that has been shewn to it by the government; on the contrary, I can assure you, that since the establishment of our hospital and chair, from sixty to seventy medical men have resorted to it for instruction. Of these, from twenty-five to thirty are now practising in the provinces, about twenty in Germany, France, England and America, at least ten have settled down in Vienna as practitioners, and most of them enjoy considerable practice, although that of their older homœopathic colleagues has increased also in proportion. It is, moreover, notorious, that many of the old school practitioners employ frequently homœopathic remedies. Homœopathy begins now to be introduced into government establishments, as, for example, the hospitals attached to the prisons of Stein and Neudorf.

We must now bring this rather long article to a close, and

respectable individual Dr. Fickel, of swindling notoriety, as to the results of the homœopathic treatment of that disease. We must not omit to mention that Dr. Caspar gives very satisfactory answers to all Eigenbrodt's objections on the subject of these diseases.

we trust we have shewn by the abstract of the controversy of of Drs. Eigenbrodt and Caspar,* that homœopathy does not deserve the hard epithets applied to it by Sir John Forbes. So far is it from being the case, that "this do-nothing system," as Sir John calls it, "falls very far below that of [*sic*] the rational practice of rational medicine, in its curative results" (p. 161); on the contrary, it rises very far above any method of treatment it has ever been compared with. Our opponents seem sensible of this, for they have altogether abandoned comparing the homœopathic with any variety of "rational" treatment. Their last "dodge" is to compare homœopathic with expectant or do-nothing treatment, and if, by much ingenuity, they can succeed in so exaggerating the success of the latter, and impugning the recorded results of homœopathic treatment, as that they shall appear nearly equal on paper, they exclaim—see, your boasted homœopathic treatment is no better than no treatment at all; how much inferior must it therefore be to good rational treatment. Thus Eigenbrodt: "the results of the homœopathic method are at best the same as those of the expectant treatment, but are much inferior to those of other active methods." Dr. Dietl has saved us the trouble of proving that no treatment at all is better than allopathic treatment (by bloodletting and by Tartar emetic), in one of the acute diseases that was most thought to require *active* treatment, and accordingly our opponents now pit us against Dr. Dietl and no

* We would observe here, that in our opinion the practice of Drs. Wurmb and Caspar in their hospital does not fairly exhibit all that homœopathy can do in the diseases they treated. Their self-imposed rule, to prescribe nothing but the 30th dilution, trammelled their operations and deprived them of the advantage they might have often derived from an administration of the remedies in dilutions more appropriate to the cases. This rule at the same time, we readily allow, had one advantage, that of proving that the 30th dilution can cure diseases; but we believe it to have been disadvantageous if the question meant to be solved had been—how much can homœopathy effect in diseases? And, for this reason, we believe the results in Dr. Wurmb's hospital—extremely favourable though they were—were not the best for comparison with those of allopathic treatment. We regard Wurmb and Caspar's practice more in the light of a valuable experiment demonstrating the power of the 30th dilution, than an exhibition of the full value of the homœopathic treatment.

treatment, giving the world to understand that their "rational" treatment is infinitely better than Dietl and homœopathy. We acknowledge the prudence of this course, but cannot say much for its ingenuousness. Our opponents discreetly keep their wonderful rational system in the background, and will not venture on a comparison of it with ours. What it is, this rational system, they are not even agreed among themselves. Our two opponents, who have given rise to this article, are evidently not at one on the subject; for while Eigenbrodt's superior method is "active treatment," Sir John denounces active treatment as injurious, and insists that the rational method is inactive expectancy. It is, however, only vaguely that any indication is given of this admirable system of treatment. Perhaps it exists only in name, like the Mrs. Harris of that exemplary woman Sairey Gamp. Until it is produced, however, we may be allowed to doubt its existence altogether; as the said Sairey's bosom friend, Betsy Prig, doubted the corporeal reality of the awful Mrs. Harris.

The True Art of Healing: a Discourse on the Rational System of Medicine.—By THOMAS K. CHAMBERS, F.R.C.P. Lecturer on Medicine at St. Mary's Hospital. London: Churchill, 1856.

IN the far West of the great Metropolis a huge square brick building, modelled apparently architecturally after a Manchester warehouse of the primitive type, rears itself in lofty state above the surrounding houses. An inscription on the front tells the passer by that this is "St. Mary's Hospital," and the circulars state that it is "supported by voluntary contributions;" but this assertion is, alas! as false as was ever the record on a tombstone. In spite of gigantic efforts made by the committee; in spite of their "house to house visitation" in the parishes of Paddington and Marylebone, to extort donations from the unwilling pockets of the lukewarm parishioners; in spite of mellifluous sermons from episcopal dignitaries from every pulpit in the district, termi-

nating in a forced levy of silver and gold from the gratified hearers; in spite of dinners at the London Tavern, presided over by Crimean heroes; in spite of all the ordinary and extraordinary machinery for provoking charity, St. Mary's Hospital is *not* supported. It is left by the wealthy denizens of Tyburnia to languish in misery and debt. Having space and to spare for 300 beds, it has never been able to fit up more than 150, and this only by drawing so largely on future hopes that every year since its foundation it has plunged deeper and deeper into debt. As we write, gigantic placards are staring at us from every dead wall and hoarding, announcing that the committee are about to reduce the number of beds to 100, in consequence of the desperate state of their finances. To what cause this unflourishing state of things is to be ascribed, it is not our present business to inquire. Whether it is that the age of charity is past for ever, as some assert, or that no hospital was required in the rich and well-to-do region of Tyburnia, or that the inhabitants of that favoured region have a suspicion that the present hospital was a job from the commencement, set on foot by the friends of a medical man disappointed of a berth in another hospital; whatever be the cause, the fact remains, that St. Mary's Hospital has never taken with the charitable public, and so it stands afflicted with premature decay, dragging out a precarious hand-to-mouth existence, hopelessly and inextricably involved in an ever increasing debt.

But if the finances of the hospital present a sad and disheartening picture, it is very different with the medical corps attached to it. The decaying institution is blessed with a "brilliant staff" of officers, who, if they may not have a chance of accompanying it in a triumphal career, may, at all events, have the melancholy satisfaction of gracing its obsequies. St. Bartholomew's, with its 600 beds, has not nearly such an imposing array of medical officers and lecturers. For this shabby 150—soon to be a shabbier 100—beds, there are physicians and assistant physicians, surgeons and assistant surgeons, physician accoucheurs and surgeon *accoucheurs*, house surgeons, apothecaries, oculists, aurists,

dentists, cuppers, lecturers on every single branch of medical and surgical science known in other schools of medicine, and lecturers on some half dozen specialités unknown elsewhere. There are in all twenty medical officers for the 100 or 150 beds of St. Mary's, while St. Bartholomew's with its 600 beds, has only thirteen medical officers.

Notwithstanding the smallness of the field for practice possessed by the medical officers of St. Mary's, they are almost all voluminous writers on medical subjects, and as will be seen by the title of the work at the head of this article one of them lays claim to the discovery of *the true art of healing.* Alas! that the institution in London where the truth in healing is proclaimed should be left to languish by those to whom that truth is of so much importance! But, Dr. Chambers, console yourself, the giddy multitude have ever left truth unheeded at the bottom of her well to run after glittering falsehood; the apostles of the truth have always been either persecuted or neglected; why, therefore, should you escape the common lot of your race? You have done your devoir—you have proclaimed the true art of healing, *viva voce,* to a "mixed assembly," and by means of the press to the more select circle of those who have a shilling to spend. 'Tis a pity, perhaps, that just as you have promulgated your discovery of the true art of healing, the committee should have come to the resolution to cut off one third of the field for the exercise of your beneficent discovery, but no doubt you will be able to cure as many patients with your true art in the smaller number of beds, as were formerly cured by a false art in the larger number.

We open the pamphlet that professes to reveal to us the truth in medicine with feelings of the most intense curiosity, mingled with respect for the bold author, who, in these degenerate days, when the heads of his profession are unblushingly trumpeting forth their absolute scepticism, dares to rear the standard of a new and an earnest faith, inscribed with the motto—"The True Art of Healing." No wavering doubts here, we exclaim; no calculation of probabilities, no hesitation as to the rival claims of opposite modes of treat-

ment; here is the revelation of the true art, the evangel of medicine. Without going so far as Gerald Massey who proclaims the Edinburgh obstetrician to be the "Messiah of Midwifery," we may surely accord to Dr. Chambers the title of the "Evangelist of Physic."

Dr. Chambers commences by a tirade against scepticism, denounces the prevailing "want of earnest faith in the real truths of medicine," and he relates the following anecdote: "A few years ago, a young physician was severely taken to task by an ancient practitioner for requesting to see a second time a patient before a diagnosis could be given. 'This will never do,' he said, 'you must always be positive—never mind being wrong, so that you are positive.'" We are not very sure from the way in which this is brought in, whether Dr. Chambers approves or disapproves of this "ancient practitioner's" advice; for while on the one hand he says "it cannot be surprising the public discern the want of real earnestness in such advisers;" on the other hand he says, in the very next sentence—"It is the frequency of want of confidence in his data, and the consequent grounds for disrespect for these data, [whatever that may mean] that diminishes a medical man's weight in society so much below what it would otherwise be." "How shall we remedy this evil?" he asks. Which evil? we would interrogatively reply. The medical man's amount of confidence in his data, or his diminished weight in society? As Dr. Chambers does not tell us which of these evils he alludes to, our readers must judge for themselves to which of them the remedy best applies. The remedy, then, is thus enunciated: "Let us make sure that there is such a thing at all as an art of healing, and try to get a clear notion of a systematic first principle on which, if true, it must be based." But before trying to get this clear notion, our author thinks that as homœopathists, hydropathists, kinesipathists, and mesmerists have a bond of union in their name, the first thing necessary for the "true art" is to find a name for it, and he accordingly invents the name of the "RATIONAL SYSTEM," for his coming bantling. In ordinary life the child is usually produced before it is

christened, and in the case of the medical sects our author refers to, their principles were first enunciated before their distinctive appellation was bestowed—nor did the originators of these systems usually give them the name they at present enjoy; but the rationality of the "true art" is shewn by the parent standing godfather to his progeny before producing it. Other systematizers have thought more of their system than its name, but Dr. Chambers thinks that possibly his rose might not be in good odour with the profession by any other name than that of his own bestowal. Juliet was but a fool to undervalue a name; Dr. Chambers could have told her that the name is of great moment in making a truth in medicine acceptable to its professors. Cavillers may object to the name chosen by Dr. Chambers. They may possibly insinuate that the title is too general for the denomination of a system of medicine. It does not necessarily exclude other systems; thus, any one of the medical sectarians enumerated by our author might contend that his was *a rational system* in medicine, just as any one of a thousand fond papas might allege that his darling was "a good boy," but a parent would scarcely be so absurd as to have his heir christened "the good boy." Following the analogy of the sects Dr. Chambers professes to imitate, one of three courses is open to him; first, he might name his "true art" after the grand principle on which it is founded, like *homœopathy;* or, secondly, he might name it after some peculiarity in its practice, like *hydropathy* and *kinesipathy;* or, thirdly, he might name it after its great discoverer, like *mesmerism.* As the name is given before the principles or peculiarities of the art are revealed, the third seems to be the only course available to our author; he should, therefore, have called his "true art" *Chambersism.*

Having settled that there must be an art of healing, and having fixed upon a name for it, Dr. Chambers next proceeds to tell us what it is.

"The basis of the Rational System," says he, "is, that *the best guide to medical treatment is the physiological observation of the body in health and disease, and of the action on it of external agents.* And hence, that the true mission of

the medical profession is to find what are the essential changes in the vital functions presented by cases of disease, and also the essential changes in the vital functions effected by agents in our power, and to counteract the former changes by the latter."

Such is, and in so many words is expressed the basis of the "true art of healing." This is its "systematic first principle" according to its propounder. For the life of us we cannot perceive any therapeutic principle in the above, beyond the vaguest possible maxim to the effect that diseases are to be cured by medicinal agents. The wording of the maxim is so extremely general that the reader, whether he be allopathic or homœopathic, enantiopathic or expectant, may equally assent to it. Divested of its pedantic verbiage it simply means, observe the effects of disease, and the effects of medicinal agents, and cure the former by the latter. But how this is to be done the maxim does not give us the slightest hint.

Some fifty years ago, a thoughtful and learned German, wrote a paper whose object was akin to that proposed to himself by Dr. Chambers. Like our author, he made sure that there must be a "true art of healing," and like our author he set himself to discover its "systematic first principle." He was not, however, content with the bare and useless maxim propounded by Dr. Chambers—that diseases must be cured by medicinal agents—but he endeavoured by painful study and by toilsome experiments to ascertain how medicinal agents must be employed in order to cure diseases. After many years of laborious search, he was rewarded by discovering the true principle for the employment of remedial agents, and thousands of disciples in all parts of the world testify to the truth of the maxims he laid down. If Dr. Chambers will follow in the path of Hahnemann, if in place of dealing in pedantic phrases that only serve to darken counsel, he will seriously endeavour by experiment and observation to discover the rule for the employm
agents, "the systematic first princi
ing," (to use his own phras

with a similar success to that of the German medical philosopher.

We learn from subsequent passages of Dr. Chambers' lecture what are his views respecting the curative employment of medicinal agents, and so far from finding anything novel or original, we are astonished to learn that the true art of healing is preeisely that which was promulgated by Galen ever so many centuries ago. The rules he lays down for the curative treatment, exemplified in the treatment of a burn, are—

1st. To modify external circumstances so that the diseased state shall cause less inconvenience. Cover the burn with cotton wool. This will prevent the air causing pain.

2nd. To modify external circumstances so that the diseased condition shall receive no fresh stimulus; cover the burn with cotton wool. This will prevent the air causing more inflammation.

3rd. To start in the body antagonistic processes opposite to those which are noxious. The burnt part when inflamed is hot, apply evaporating lotions to diminish the abnormal temperature. The raw surface is over-sensitive, apply alcohol or opium to diminish its sensitiveness. The burnt surface is suppurating profusely, wash it with nitrate of silver, which will check the suppuration.—But this is precisely the practice medical men have been pursuing ever since the days of Hippocrates. This is the practice that Galen formulized *contraria contrariis*. This is the practice which, in the case of burns, has been productive of no small amount of fevers, contractions, metastasic purulent deposits, and intestinal ulcerations. And this is the "True Art of Healing?" Really, Dr. Chambers' colleagues must feel as astonished and as beholden to him for this piece of information as was M. Jourdain to his teacher of philosophy. "Par ma foi," said the worthy bourgeois, "il y a
as de quarante ans, que je dis de la prose, sans que j 'en
rien; et je vous suis le plus obligé du monde, de
opris cela."

bers gives further specimens of the application

of the "Rational System" to practice in two cases of pneumonia, one of which in which the heart beats strongly, is treated with bleeding, antimony, and opium; and the other in which the heart beats weakly, is treated with dry-cupping, wine, and opium, and the latter, he adds, "stands as good or better chance of recovering than the first." We don't know how that may be, but this we know, from the experiments of Dr. Dietl of Vienna, that while under the bleeding and antimony system, twenty-two per cent. of the pneumonic patients die, under the do-nothing or expectant plan only seven per cent. are lost, and we further know that under the homœopathic treatment the mortality is only four per cent. But then, possibly, seven and four per cent. are not a *rational* per centage in pneumonia, at least they certainly would never be met with in our author's "True Art of Healing."

Dr. Chambers bears unwilling testimony to the increasing popularity of homœopathy, and gives an odd enough reason for it, "In spite," says he, "of the confession that Hahnemann's dicta are 'ineffable nonsense,' educated persons go to homœopathists; not from any belief in the system, but avowedly in order that they may give nature a fair chance by avoiding drugs." By whom, we would ask, are Hahnemann's dicta confessed to be "ineffable nonsense?" Not, certainly, by himself or his disciples; and if not by them, who else could *confess* them to be one thing or another? Our opponents might *pronounce*, but could not *confess* them to be "ineffable nonsense;" just as an opponent of Dr. Chambers might *pronounce*, but none but himself would have a right to *confess* his pamphlet to be "ineffable nonsense." But let this pass, and let us admire the alleged reason of educated persons going to homœopathists. Surely, if they only wished to give nature a fair chance by avoiding drugs, they might keep their [illegible] in their pockets, and leave off doctoring [illegible] or if they thought it indispensable to th[illegible] have a family doctor, w[illegible]uld hinder [illegible] tinuing the attendance [illegible] Chambers, [illegible] prescriptions into the fir[illegible] *tion benches* of homœopath[illegible]

drugs, they would only foster the impudent imposture of homœopathy, and disgust their old friends the practitioners of the Rational System. "And yet," says Dr. Chambers, "I am bound to add that they appeared generally prudent and judicious persons." Surely appearances must have been very deceptive when they could act so very injudiciously.

"The followers of the homœopathic system," says our author, "have no confidence in its power to prolong life, witness the bankrupt condition of the Homœopathic Insurance Company, whose offices are now to let." Dr. Chambers does not argue here in a logical manner. He surely cannot contend that the failure of a commercial association can indicate a want of belief in the system whose name it bears. As well might he conclude that faith in Protestantism was on the decline because the Protestant Life Assurance Company came to such an abrupt and ignominious end the other day. But the fact of the matter is, that not only is Dr. Chambers wrong in the conclusions he draws from his premises, he is absolutely wrong in the premises themselves. *The United Homœopathic and General Life Assurance Society*, (for such is the title of the Association to which he refers,) is not bankrupt, nor are its offices to let. Its history is as follows:

The idea of establishing an Assurance Society offering peculiar advantages to those treated homœopathically, did not originate in the profession, but among mercantile men. It was a purely commercial speculation. The originators were convinced of the superior "viability" (as Professor Laycock would say) of those who when ill submitted to homœopathic treatment, and they christened their Association *Homœopathic* in order to enlist the co-operation of the adhe- [illegible] of homœopathy [illegible] oth in and out of the profession. [illegible] about [illegible] r work in the wrong way, or they [illegible] , or they entangled themselves [illegible] cessful scheme of a similar [illegible] e, none of the leading men [illegible] say to them, and so find- [illegible] hies of the profession,

they resolved to renounce their special appellation, and they changed their name to the "English Provident Life Assurance." Under its new title this society is said to be flourishing, and it is noteworthy that they still offer to insure the lives of homœopathists at the reduced premiums. It will be observed from this sketch of its history that the establishment of the Homœopathic Assurance Society was not owing to any impulse from the homœopathic practitioners, and although a few of these at first lent their names to the scheme, several of them soon retired on finding that it was a mere commercial speculation. A life assurance association called *The New Equitable* was some few years ago established under the powerful influence of *The Lancet,* and apparently for the purpose of giving a two-guinea fee to the medical attendants of insurers. Notwithstanding this and some other tempting baits held out to medical men, the New Equitable languished for lack of their support, and has recently become extinguished, or at least been swallowed up by a more hopeful scheme. Will Dr. Chambers apply his principles of logic to this case, and from the extinction of the New Equitable infer the want of confidence of the medical profession in the *Lancet,* and their dislike to two-guinea fees? On the whole we think it would be more logical in Dr. Chambers to infer the want of confidence of its adherents in allopathy from the bankrupt state of the unendowed allopathic hospitals generally, and of St. Mary's particularly, than to predicate a distrust of homœopathy in its partisans, from the supposed decline of a purely commercial speculation, whose success or failure must necessarily depend on quite other causes. In fact, Dr. Chambers has discovered in the presumed extinction of this Assurance Society what he would call a "*soi-disant*"* mare's nest, by no means an uncommon discovery by those whose prejudices prevail over their anxiety to learn the truth.

Dr. Chambers' pamphlet be

* Dr. Chambers (p. 13) s
which is about as appropriat

Sir John Forbes' book on *Nature and Art in the Cure of Disease* in one point, but differs from it wonderfully in another. Both insist with a persistance and reiteration that would almost lead us to believe that the opposite opinion had been entertained (though where or by whom we are at a loss to imagine) that diseases are merely perversions or modifications of the conditions and processes of health. But while Sir John Forbes almost denies that there is a medical art, and stigmatises almost all the therapeutic appliances of the old school as more hurtful and obstructive than beneficial and helpful, Dr. Chambers' pamphlet is one long laudation of these same therapeutic measures in the use of which he asserts consists the True Art of Healing.

Unfortunate practitioners of the Galenic school! unfortunate students of medicine! when your heads and teachers differ so irreconcileably, what part will you choose? "Under which king, Bezonian, speak or die." Or rather we should say, "speak and kill." For if with Forbes you profess a scepticism in physic, and practise a do-nothing expectancy, Chambers will accuse you of letting your patients die; and on the other hand, if with Chambers you wage war upon disease with lancet and drugs, Forbes will sneeringly observe that your patients might have recovered but for your stupid interference. In the meantime homœopathy shines with a pure and steady light unmoved amid the distracting waves of controversy that surge around it. The heads of the allopathic system who cannot now ignore it say it is a beacon to warn you off the shoals of quackery; but we allege it to be a Pharos leading to the haven of truth in medicine. When you are tired of buffeting with the billows of doubt and uncertainty, come and try the refuge of a faith in medicine which we offer you. You will find it more satisfactory to your conscience to have a distinct principle of therapeutics for your guide, than to wander as at present among a hundred [illegible]ing opinions, and your patients will

MISCELLANEOUS.

The Manchester Homœopathic Medico-Chirurgical Society.

We have much pleasure in announcing the formation of a society under the above name in this city, having for its objects the "advancement of the science and art of medicine and surgery, and the defence of all duly qualified homœopathic practitioners." A circular, signed by five homœopathic practitioners residing in and near Manchester, suggesting the propriety of taking such a step, was early in April forwarded to all the qualified members of the profession practising homœopathy in that district. The result was, that a meeting of those willing to forward the end proposed was held at the Waterloo Hotel, Manchester, on the 30th of April. At this meeting the society was instituted, a committee appointed to prepare a code of laws, and a circular convening a meeting for the 14th of May, and inviting the co-operation of the qualified practitioners of homœopathy residing in Manchester and the neighbourhood was directed to be sent round.

At the meeting on the 14th, the following gentlemen were enrolled as members: Dr. Blumberg of Macclesfield; Mr. Brown of Pendleton; Mr. Cox of Rochdale; Dr. Galloway of Manchester; Mr. Joce of Chester; Drs. Mathews, Molloy, Phillips, Charles D. F. Phillips, and Mr. Pope of Manchester; Dr. Sinclair of Bolton, and Dr. Walcott of Bury. Mr. Pope was requested to act as secretary and treasurer for the ensuing year. The laws of the society are before us, and they seem to be very judiciously framed.

We heartily wish success to this undertaking, and trust that it will speedily receive an accession of members from the neighbourhood in which its operations are carried on. Manchester has now either fourteen or fifteen duly qualified homœopathic practitioners residing in it, and the neighbouring towns are also supplied with medical students of our system.

Homœopathy in Brazil.

After homœopathy was introduced into Rio de Janeiro by Drs. Mure and Martins it gradually spread over the provinces, and especially in Bahia, where it was principally practised by two French physicians. But it was its success in the cholera epidemic of 1850 that gave the chief impulse to homœopathy in Brazil. It is well known how frightfully the epidemic raged in the provinces, and how physicians, priests, magistrates, and every one who could, fled in panic far from the pestilence, so that all the efforts of the government to mitigate its evils by supplying physicians, medicines, food and clothing were rendered nugatory.

The sisters of charity, of the order of Vincent de Paul, proved a praiseworthy exception in the midst of this general terror. They were soon joined by some young physicians sent by the government. They hastened to render their services where necessary, but with allopathic remedies they could not effect much. In Cochacira a town of between 12,000 and 15,000 inhabitants, and in St. Amara with from 6000 to 8000 inhabitants, there died 8000; on the other hand in Maccio, where Portes, one of the French homœopathic physicians alluded to, was engaged, and where the patients were nearly all treated homœopathically the result was much more favourable, there died only about 600. Whilst our allopathic physicians lost 42 out of 47 cases, Dr. Portes lost only 11 out of 34. A number of friends and believers in homœopathy assisted him, giving their aid to the patients, and administering the homœopathic remedies, whereby they obtained very favourable results. Although it is difficult to obtain accurate statistics in Brazil, yet this much is certain, that where homœopathy was practised with skill, it obtained much more favourable results than allopathy. As a consequence of the energy of the homœopathists on this occasion and of their great success, they attracted the attention of the authorities, and the government has granted an official position to homœopathy such as it enjoys in no other country.—*Hirschel's N. Zeitsch.* ii. 2.

Prize.

In the May number of the Austrian Journal there is an announcement of a prize of £20 being offered by the Austrian Homœopathic Society for the best arrangement in the German language of any one

of the medicines hitherto proved by the members of that society, viz., Aconite, Bichromus kali, Bryonia, Colocynthis, Natrum muriaticum, Sulphur, and Thuja occidentalis.

We may take this opportunity to remind our readers that though in England no prize has been offered, yet the Hahnemann Publishing Society have a work open for a similar object, viz., the Hahnemann Materia Medica. As yet only three medicines have been published owing to the paucity of workers, but it is hoped more attention will be given to the subject, and competent men will come forward and show that the English homœopathists are not behind-hand in the cause of the improvement of our Materia Medica. The society does not prescribe any plan on which the medicines are to be arranged, but each worker is left to the exercise of his own skill. The choice of works to be received for publication by the society is vested in a committee chosen by the general body of members, and to secure impartiality and the infusion of new members, a rule has been made that one of the committee retires annually, and is not re-eligible for a year. Any one who is willing to take part in this work is hereby invited to come forward, and is requested to communicate with Dr. Black, 12, Lansdowne Place, Clifton.

Revival of Homœopathic Periodical Literature in Vienna.

Since the decease of the Austrian Quarterly Homœopathic Journal, in 1848, there has been an absolute cessation of periodical homœopathic literature in Vienna, until the present year. We have now before us four numbers of a new homœopathic journal, published at Vienna, in 1857, under the editorship of Dr. J. O. Müller, and contributed to by several of the old writers in the defunct journal. This new organ of homœopathy is published monthly, and bears the title of Journal of the Austrian Society of Homœopathic Practitioners. The number before us contains several interesting papers, one of which, the valuable Proving of Sulphur by Dr. Wurmb, appears in part in our present number. In the history of that redoubtable hero Baron Münchhausen, it is related that on one occasion when the baron's postilion attempted to play some tunes upon his horn one frosty day, no sounds were given forth by the frost-bound instrument, but that a long time afterwards when the horn was hung up in the warm hall of the hostelry, it thawed, and the

tunes that had been played inaudibly on the road, now entertained the baron and his friends as they sat at table.

This new journal is like the postilion's horn in this, that it is now playing tunes that have been composed long since, but which have apparently lain frost-bound ever since 1848. Thus we observe that many of the papers must have been written many years ago, for the authors of several of them have been dead and buried long since. The papers, however, are not the worse for the keeping, and we welcome them heartily. We trust that the new journal may have a long, a prosperous, and a useful career, and that it will keep up the high scientific tone with which it has started.

Dr. Liedbeck on Kali Bichromicum.

(From the Austrian Homœopathic Journal, vol. i., p. 485.)

It is remarkable that the Kali bichromicum has been as yet so little appreciated in practice when we consider that its physiological proving has been so excellently set forth in the Austrian Journal by a number of German and English experimenters, that scarcely any other medicine (ne Hahnemannicis quidem exemptis) can equal it in that respect. From my own experience I can report several cases of chronic catarrhal affections, with syphilitic complications, in which it acted like a charm, while the Hydriodate of Potash had been of no use. These results have induced me also to study this medicine diligently. Almost daily I go through part of the 1,095 symptoms of that proving [in the German edition] and, I must confess, with the same interest as thirty years ago I did the Organon and Pure Materia Medica of Hahnemann.

Here are some of the cases :—Mr. N—— M——, æt 38, of spare frame, blonde, father of four healthy children, with the exception of coryza and loss of taste, quite healthy, was affected with syphilis in 1841. In 1844 after long and severe mercurial treatment he was pronounced by his allopathic doctors quite free from the disease.

But there remained a troublesome coryza and the loss of taste, which the patient himself attributed to the remains of the syphilitic disease. As the loss of his sense of smell and taste was grievously felt, and as his family doctor declared that he could do nothing more, he came to me, seeking help through homœopathy.

The whole affection appeared to me a pseudo-syphilitic mercurial

disease, and I at first gave him Kali hydriodicum 1, five drops twice a day from 24th March to the 28th April, 1856. But no satisfactory improvement was manifest, so I gave him on that day the 2nd dil. (centesimal) of Kali bichr., a dose night and morning. The patient did not return till October, and then it was to express in the warmest terms his thanks for his radical and permanent cure. He had waited till then in order to be sure that his cure was complete, as he had hitherto always been worse at that season.

The next was a most difficult case of inveterate syphilis, which had been treated four whole years at Gräfenburg with all the appliances of Priessnitz's system. I gave the Kali bich. in the same way as in the above case, and a cure was obtained in a surprisingly short space of time. And yet the patient had not only had the Hydriodate of potash in full allopathic doses, but had also undergone the process of "syphilization" with but slight transient result. I mention particularly this case of cure because it took place in such an astonishing manner, that even an allopathic colleague asked how it possibly could be that the ten thousandth part of a grain of Kal. bich. could produce such results. In addition to these, I may mention that this medicine has done good service in my hands against chronic catarrh of the stomach, and hypertrophy of the heart, and insufficiency of the aortic valves.

Nevertheless our repertories are still silent respecting it.

Remedies for Epilepsy.

During the discussion of Dr. Sieveking's paper on epilepsy, at the London Medico-Chirurgical Society, last April, Dr. Snow said, "That Mr. De la Rue had presented him with specimens of two volatile hydrocarbons distilled from Rangoon tar, which he (Dr. Snow) found to produce symptoms just like those of epilepsy in animals which inhaled them. The guinea-pigs and white mice on which he had experimented with these substances continued to walk about, and appeared quite conscious up to a certain point, when they were suddenly attacked with violent epileptic convulsions, and were insensible during the fit. If they were removed from the vapour, as soon as the convulsions commenced, they recovered r
subsequent ill effects of any kl
main in the vapour, they di

observed that the white mice became rather livid just before the convulsions commenced.

"Sir Charles Locock had noticed the omission in the paper of a very common cause of epilepsy—viz., dentition. He did not quite agree with Dr. Ashburner, that all cases of the disease could be cured by the removal of a tooth; but he had certainly seen the affection cured in more than one instance by removing over-crowded teeth. A great number of cases of epilepsy, both in boys and girls, arose from the practice of onanism. This was a cause very frequently overlooked, and might account for the great increase in the disease of late years. There was a form also of hysterical epilepsy connected with the menstrual period, and as periodic as that function. This form of the disease was very difficult to treat. The attacks only occurred during the catamenial period, except under otherwise strong exciting causes. He had been baffled in every way in the treatment of this affection. Some years since, however, he had read in the *British and Foreign Review*, an account of some experiments performed by a German on himself with Bromide of potassium. The experimenter had found that when he took ten grains of the preparation three times a day for fourteen days, it produced temporary impotency, the virile powers returning after leaving off the medicine. He (Dr. Locock) determined to try this remedy in cases of hysteria in young women unaccompanied by epilepsy. He had found it, in doses of from five to ten grains, three times a day, of the greatest service. In a case of hysterical epilepsy which had occurred every month for nine years, and had resisted every kind of treatment, he had administered the Bromide of potassium. He commenced this treatment about fourteen months since. For three months he gave ten grains of the potassium three times a day. He then gave the same dose three times a day for fourteen days before the menstrual period, and latterly had only ordered it in the same dose, three times a day, for a week before the expected catamenia. This patient had had no epilepsy since the commencement of the use of the potassium. Out of fourteen or fifteen cases treated by this medicine, only one had remained uncured."

For what reason Dr. Snow mentioned those hydrocarbons during
cussion about the remedies for epilepsy we cannot imagine.
vague idea of the homœopathic action of specifics was in his
any rate, the interesting facts he states can be of no
xcept on our principle, and we hope these volatile pro-

ducts will be obtained by some of our body and properly proved, for we cannot but think that those medicines that act by inhalation are more likely than any other to furnish us with medicines likely to be useful in cases of convulsions, as no other medicines can generally be administered during the actual paroxysm. Dr. Snow has been engaged for some time in proving on men and animals the pure effects of a variety of volatile hydrocarbons in the somewhat hopeless search for an anæsthetic that shall possess all the good properties and none of the inconveniences and risks of such agents. As the fundamental truths of modern chemistry were discovered in the search after the chimerical philosopher's stone, so we hope Dr. Snow may stumble on some highly valuable specific medicines which our school ought to be the first to profit by. Therefore we recommend all homœopathists to study with care the experiments he has already made, and to follow any future ones with attention. The recommendation of Bromide of potassium by Sir C. Locock is also a valuable hint to our body to direct more attention to that medicine, which is still imperfectly proved, and is too little used clinically.

Homœopathy in Siam.

The King of Siam's Account of his Wife's illness and death.

From Bowring's Siam, vol. ii, app. F.

After giving a sketch of the history of the deceased queen, and relating that "the ceremony of royal nuptiem and her coronation took place on 2nd of January, 1852, which is forty-eighth year of His Majesty's age, and eighteenth of Her Majesty's," the royal historian goes on to say in his peculiar style of English, "But alas! the pleasure of super-agency (God Deds merits and demerits, &c. demons, &c., according to different various faiths,) must be otherwise. Though since she was married and crowned in full dignity of the queen consort, and united firmestly with his majesty, alway in both private and publick, She was respected, treated with highest honour by whole people of Siamese kingdom, and has received very often respectful compliments and some presents from the adjacent tributary countries in every direction, and even friendship and some presents from certain noble persons and gentlemen of foreign countries, who are formerly correspondent friends of His Majesty the

present King. So that she was happy during six months, in which she became pregnant in due course; after those proceeded month, most unfortunate event has fallen upon her, that she became sick and ill of fatal disease, which firstly appeared to be curable, by all physicians both native and foreign proffered her disease to be in usual nature of pregnancy, as it occasioned by merely frequent vomiting and displeasure of food; then its symptoms appeared exactly once, on the 25th June, 1852, by occurrence of painful uneasiness. . . . . She was treated by Siamese official doctors, for whose treatment she suffered but four or five days from attack of nause and vomiting and sore or pain in her abdomen, after eclipse of moon on 1st July, she had seemingly recovered her health, and got well from the foresaid uneasiness. After forty days however Alas! when she arrived the sixth or seventh month of her pregnancy she returned to her former painful suffering by seizing with pain in the regeion of abdomen, that was followed night of 10th of August with occasional vomiting. On the next day symptoms of painful fever appeared which increased till 14th August after that she became better, nearly regained her former state but her strength and quantity of food was less than usual. On the night of 18th August however she had a return of sickness and was worse than on the former occasion. her nause and vomiting continued days and nights with great pain in region of her abdomen, so that her miscarriage became inevitable. it accordingly to the same consequence took place on Saturday the 21st August at one o'clock p.m., when her majesty has safely delivered a living male royal infant. Her royal Son, though very feeble and small was born alive crying and giving the usual signs of infantile life, so that many persons of royalty and ability were immediately assembled, with the officers of the palace and welcomed the royal hier's arrival by birth with highest manner of music and other demonstrations of joy: they made its bed in the golden seat, covered with white surrounded royal weapons book pencil &c. according to ancient regal custom and placed its careful and protection Alas! but three hours after his birth on a lapsed and stopped his breath on four o'clock p.m. of that day. so its lif was very brief one. the officer then have carried away its remains secretly let her Majesty know nothing about it pretending that it was placed in other room very well because her former sickness still continued after deliverance of her child. So Her Majesty became worse on the first night of her confinement by

continued vomiting, the strokes or times of which could not be counted, great quantity of substances mocult or phlegm spittle, just eaten food &c. got out from her mouth muchly, so she could not breathe very well, and almost would lost her life for that attack on the night of 22nd August, several Siamese different physicians were assembled and consulted and tried to relife her, but none could made her continued vomiting be stiled even but half an hour. His Royal Highness Prince Krom Hluang wongsa dhiraj snidh, has tried to give one or two droped of Homœopathic Medical work, by which Her Majesty's long-continued during the night vomiting and nause were so stopped or relifed as she could happiness of sleeping well on four or five o'clock a.m. On next day (23rd August) His Majesty the King, and His Royal Highness the Prince "Krom Hluang wonsadhiraj sniddh," and other many princes and her servants consulted with several Siamese physicians, and took the final counsel of all who in her service and former treatment to put her under the care Doctor D. B. Bradley one of American physicians now in Siam who were called to consult with him.

"Then Doctor D. B. Bradley connexted her treatment according to the homœopathic mode which was just introduced to Siam on Ulitimo by himself.

"It was not so much believed in by Siamese countrymen as it ought to be necessary to indulge in part Her Majesty's wish to follow the usual Siamese customs of confinement, and accordingly she layed by the fire as it is universal practice with the Siamese females after the birth of their Children the contrary mode from most many around her was inevitable if it were prohibited by Dr. D. B. Bradley and his believers a few.

"Since so treatment of the American Doctor by the Homœopathic mode seemed to be no better as Her nause and vomiting and getting of the kind of fever was seldom by days, but could not be reliefed at all, the considerable attack of the disease occasioned every day, during seven or eight days so that on 28th August, which was seventh day of the death of Her Royal Son, little Chaufa (honoured name of children or persons born of the King with the Queen or any high princess, or any other princes with mother who was Chaufa or of both Chaufas in Siam) [illegible] Her Majesty's upspring, His [illegible] considerable valued donation [illegible] gave donation of [illegible]

by throwing or falling off in every direction of Her Majesty's residence to both men and women going and coming around upon same time. This considerable there money made for customary funeral service and offering for the death of his Royal Highness the expired prince little Chaufa, her feeble son because he came to be royal upspring of His and Her Majesty, though he did live but three hours, and received the royal infantel honours but in moments.

"After since the 29th and 30th of August however, she unfortunately became worse, by vomiting some black, and some greenish and yellowish matter, which determined by many physicians to be her bile mixed with something from her stomach, and the former kind of the fever more advanced so that her pulse unduly quicked. Then Doctor Bradley petitioned to her and the royalty and nobility to do her out of laying in fire in usual Siamese custom and receive his treatment according to his pleasure in every respect. it was permitted and accorded. Under so only the homœopathic treatment she slowly seemed to be improved by loss of her vomiting and nause and disappearance of the affection by attacking of the kind of fever, but her food yet was less and her strength became lost, making her very lean and feeble.

"She so appeared to be in continued betterness till 11th September when or on which day swelling of her feet and other bad symptoms were appeared to certain parties of Siamese physicians again in fact Her Majesty Himself in her conscience or credit of nature of her mind, does not believe and please Dr. D. B. Bradley, who is a foreigner and seemed to her being sranger and also his work in new mode of the Homœopathy, in which but a drop and drop of sprit only put in one or two spools of pure water in use of her frequent drinking, also the statements of the same Doctor and his believers became almost unbeleivable to her as hardly as without present examples of healths of any partient of such a disease as similar of Her. When she was tried in Medical Work of Siamese physicians, who gave her treatment in usual mode of allowpathy. But alas! After three days Her Majesty did not returned to be but little better Merely growing worse, instead of better so that none of Siamese physicians could state or accept to make her well.

was again called, and invited to treat her

On the occasion of treatment of Siamese

ck and yellowish matters continued,

accompanied with sore and painful affections in her breath &c. occurred seven or eight times per a day.

Since return of Doctor Bradley curing her in the homœopathy, in which mode he having relinquished or negled his knowledge of Alowpathy (in which he had been worked very long, and hardly believed and devoted to, or he could not allow a use any other Medical work of homœopathy at all) by 16th September she seemed to be little better by being scarceness of so frequent vomiting of black or yellowish or green matters, which were supposed or determined by her physicians that was her bile going to her stomach and every symptom of loadness having seemingly improved, because her affliction attacked as seldom as less than on the former days, when she was at treatment of Siamese physicians. but O! her weakness and refusal of convinion food yet prevailed on her, because the vomiting still continued as every day, as there was no day on which there was no vomiting, continued obstinately refusing to yield to any remedies.

"On demise or relapsing of a few days Doctor Bradley could not do her vomiting less, but instead of that her vomitings returned to be most frequent, and aggravation of her symptoms, until the yellow colour appeared in her face and body, consequently she was again put in the hands of official Siamese physician, who did not accept to cure her with their credible statements or determination. for this consequence the proclamation issued with offering of reward of many piculs of money who would relife her and make her former state of health. On this occasion since her becoming worse in hands of Doctor Bradley her pulse increased greaterly in frequency and on the 27th of September she became delirious because upon the same day the Royal proclamation was issued among the people of city with offering of two piculs of money for reward if any one could relife her and make her well, and there was and old physician of Siam out of official physical party of royal service, came to examine her wishing to try his manufacture, and was permitted to see her. then the old physician misunderstood her disease, deg[illegible] or delighted that she was so worse for [illegible] she did lay near of fire [illegible] her with his hard state[illegible] of her friends and kind[illegible] treatment was inevitable [illegible]

after two or three hours drinking of three or four spools of his disolved arometical medicines, she became delirious so. as she could not speak correctly as well as before and occasionately or frequently her cryings out with loud noise with proper designs and agitation to and fro took place. Then His Majesty himself immediately has rejected the same old ignorant covertude physician from his work and called Dr. Bradley again to return, he has delivered her for his treatment until the end of her life. though she appeared to all that being fatal or becoming victim.

Then Homœopathic medicines were resorted to her, but the success of the Doctor was only but partial. On first day of October her eyes became strangely fixed and she did her misopinion to be silent alway and refused both medicines and nourishment. On this occasion it was observed ascertainedly that there was an abscess that must have been occurred to her, probably before her pregnancy and has been broken for vehemently agitation of her body. Her majesty, by mean of some remedy and service on various ways, was restored to her consciousness though manifestly failing in strength until the 6th October on this interval Has Majesty the King and her kindred have brought many donations, Yellow Clothes &c. to her, and introduced her to offer her last offering to the priesthood and to receive the sacred instruction of deadly meditation according to Buddhistical tenets from High priests, where her faith was longly educated and placed. Her Majesty could accord yielding to this instruction and has offered those clothes &c. to many hundreds of Buddhist priests and received instruction benivolently though attacking of painful affliction vomiting &c. occasioned her every day and she became lost gradually her strength.

"But on 6th October alas! there appeared indubitable evidence that the abscess was also discharging its contents; after this she sunk rapidly during course of three days, and breathed her last breath on the 10th of October 1852 at six o'clock p.m. greatestly lamented and bewailed by all the Royal household."

[illegible] above history of a [illegible]ase is certainly not very intelligible, but it [illegible] being a s[illegible]men of a royal clinical record, and as [illegible] of [illegible]opathy in a remote quarter of the [illegible] historian is SOMDETCH PHRA

RETURN OF CASES TREATED AT THE LONDON HOMŒOPATHIC HOSPITAL

From the 10th April, 1850, to 31st December, 1856, inclusive.

	Total of Cases treated.	IN-PATIENTS.							OUT-PATIENTS.						
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Admitted In-Patients.	Died.	Dismissed unaltered.	Result unknown, or under treatment, on Dec. 31st, 1856.
Class 1.—Zymotic or Contagious Diseases	2591	356	319	9	3	18	6	1	2235	1659	177	36	12	7	344
Class 2.—Sporadic Diseases ..															
A. of uncertain or variable seat	3216	208	137	47	11	10	3	..	3008	1427	742	35	21	12	771
B. of the Nervous System	3032	100	43	42	5	5	5	..	2932	1204	852	17	2	33	824
C. of the Circulatory do.	384	32	7	13	3	5	4	..	352	50	167	7	3	6	119
D. of the Respiratory do.	3250	169	90	55	6	11	7	..	3081	1416	740	31	13	12	869
E. of the Digestive do.	3770	100	83	8	5	4	..	..	3670	2231	590	19	5	8	817
F. of the Urinary do.	188	16	9	5	..	2	..	..	172	75	39	3	..	..	55
G. of the Reproductive do.....	1420	41	14	23	2	..	2	..	1379	524	523	9	..	7	316
H. of the Locomotive do.....	1153	89	62	22	4	..	1	..	1064	407	276	19	1	11	350
I. of the Integumentary do..	1230	31	27	3	1	..	..	..	1199	647	263	3	..	3	283
Class 3.—Diseases from External causes	340	30	26	4	..	..	..	..	310	243	26	6	..	2	33
Diseases unspecified.....	586	..	..	..	..	..	..	..	586	60	20	..	..	4	502
Totals.....	21160	1172	817	231	40	55	28	1	19988	9943	4415	185	57	105	5283

	Total of cases treated.	IN-PATIENTS.							OUT-PATIENTS.							
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Class I.—Zymotic or Contagious Diseases.																
Variola	11	6	4	..	2	..	..	..	5	5	..	..	..	..	..	..
Varicella	5	1	1	..	..	..	..	..	4	4	..	..	..	..	..	..
Vaccinia	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Miliaria	8	..	..	..	..	..	..	..	8	7	..	1	..	..	..	..
Scarlatina	43	..	..	..	..	..	..	..	43	38	2	3	..	..	..	..
Rubeola	57	..	..	..	..	..	..	..	57	51	1	4	..	..	..	1
Roseola	2	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..
Cynanche Parotidea.....	41	3	2	..	..	..	1	..	38	29	4	5	..	..	..	..
Pertussis	249	1	1	..	..	..	..	..	248	195	15	31	2	3	..	2
Aphthæ	16	..	..	..	..	..	..	..	16	11	2	2	..	..	..	1
Diarrhœa	790	20	15	5	..	..	..	..	770	622	42	92	3	1	2	8
" Choleraic	121	5	5	..	..	..	..	..	116	107	..	4	..	1	4	..
" Dysenteric	24	1	1	..	..	..	..	..	23	18	5	..	..	..	..	..
Dysentery	66	10	8	..	..	2	..	..	56	46	1	7	1	..	1	..
Cholera	63	34	26	..	..	7	1	..	29	24	..	2	..	3	..	..
Influenza	34	1	1	..	..	..	..	..	33	27	2	4	..	..	..	..
Purpura	10	3	3	..	..	..	..	..	7	3	..	..	2	1	1	..

Class I.—A *continued.*	Total of Cases treated.	IN-PATIENTS. Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity.	Under treatment.	OUT-PATIENTS. Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Fever	147	49	45	..	..	2	1	1	98	70	1	19	7	..	..	1
„ Intermittent	19	3	3	..	..	..	..	..	16	9	3	3	1	..	..	..
„ Remittent	9	..	..	..	..	..	..	..	9	6	..	2	.	1	..	..
„ Gastric and Bilious	60	40	38	..	..	..	2	..	20	12	..	6	2	..	..	..
„ Typhus and Typhoid	55	38	32	..	..	6	..	..	17	8	..	3	4	2	..	..
Acute Rheumatism	99	80	74	3	..	..	1	2	19	14	1	..	4	..	..	..
Syphilis, Primary	53	12	11	..	1	..	..	..	41	21	4	14	2	..	..	..
„ Secondary	92	4	3	1	..	..	..	..	88	37	28	19	2	..	..	2
Gonorrhœa	151	3	3	..	..	..	..	..	148	109	12	27	..	..	..	..
Gleet	29	..	..	..	..	..	..	..	29	11	7	9	1	..	..	1
Erysipelas	115	43	42	..	..	1	..	..	72	49	8	10	5	..	..	..
Necusia	5	..	..	..	..	..	..	..	5	3	..	2	..	..	..	..
Porrigo	148	..	..	..	..	..	..	..	148	90	34	22	..	..	..	4
Scabies	47	..	..	..	..	..	..	..	47	32	7	8	..	..	..	..
Class II.—Sporadic Diseases.																
A.—*Sporadic Diseases of uncertain or variable seat.*																
Epistaxis	9	..	..	..	..	..	..	..	9	6	3	..	..	..	..	..
Hæmatemesis	15	..	..	..	..	..	..	..	15	9	5	1	..	..	..	..
Hæmoptysis	90	9	5	3	..	1	..	..	81	33	24	20	3	..	..	1
Melæna	5	..	..	..	..	..	..	..	5	5	..	..	..	..	..	..
Hæmaturia	14	3	2	..	..	..	1	..	11	6	4	1	..	..	..	..
Menorrhagia	117	5	4	1	..	..	..	..	112	70	13	25	..	..	..	4
Anæmia	35	1	1	..	..	..	..	..	34	19	10	4	..	..	..	1
Chlorosis	107	4	1	3	..	..	..	..	103	39	51	9	1	..	..	3
Dropsy	26	7	5	1	..	1	..	..	19	7	8	2	1	..	..	1
Anasarca and Œdema	49	6	5	1	..	..	..	..	43	11	19	10	..	2	..	1
Ascites	22	2	1	..	..	1	..	..	20	9	4	6	1	..	..	..
Hydrocele	11	4	3	1	..	..	..	..	7	1	3	2	1	..	..	..
Ovarian Dropsy	16	..	..	..	..	..	..	..	16	..	13	3	..	..	..	..
Hydrocephalus Chronic	5	..	..	..	..	..	..	..	5	3	1	1	..	..	..	..
Abscess	276	37	35	1	..	1	..	..	239	187	14	25	9	..	1	3
Bubo	13	4	3	1	..	..	..	..	9	5	..	1	3	..	..	..
Furunculus	175	5	5	..	..	..	..	..	170	138	18	8	4	..	..	2
Carbuncle	20	9	8	1	..	..	..	..	11	9	1	..	..	..	..	1
Ulcer	278	51	36	15	..	..	..	..	227	96	57	59	5	..	9	1
Sinus	33	2	2	..	..	..	..	..	31	8	8	15	..	..	..	..
Caries	92	9	3	6	..	..	..	..	83	15	39	25	1	..	1	2
Fistula	13	2	..	2	..	..	..	..	11	1	3	6	1	..	..	..
„ in Ano	26	3	2	..	1	..	..	..	23	7	8	7	1	..	..	..
Glandular Disease	127	3	3	..	..	..	..	..	124	67	14	37	1	..	1	4
Scrofula	260	6	1	3	1	1	..	..	254	71	105	70	..	4	1	3
Scrofulous Abscess	33	4	2	1	..	1	..	..	29	11	13	5	..	..	..	..
„ Ulcer	13	..	..	..	..	..	..	..	13	6	2	4	..	1	..	..
Tabes Mesenterica	115	1	..	1	..	..	..	..	114	44	25	31	..	13	..	1
Rachitis	59	1	..	1	..	..	..	..	58	12	19	26	..	1	..	..
Bronchocele	19	..	..	..	..	..	..	..	19	6	7	2	..	..	..	4

RETURN OF CASES TREATED AT THE LONDON HOMŒOPATHIC HOSPITAL

From the 10th April, 1850, to 31st December, 1856, inclusive.

	Total of Cases treated.	IN-PATIENTS.							OUT-PATIENTS.						
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Admitted In-Patients.	Died.	Dismissed unaltered.	Result unknown, or under treatment, on Dec. 31st, 1856
Class 1.—Zymotic or Contagious Diseases	2591	356	319	9	3	18	6	1	2235	1659	177	36	12	7	344
Class 2.—Sporadic Diseases ..															
A. of uncertain or variable seat	3216	208	137	47	11	10	3	..	3008	1427	742	35	21	12	771
B. of the Nervous System	3032	100	43	42	5	5	5	..	2932	1204	852	17	2	33	824
C. of the Circulatory do.	384	32	7	13	3	5	4	..	352	50	167	7	3	6	119
D. of the Respiratory do.	3250	169	90	55	6	11	7	..	3081	1416	740	31	13	12	869
E. of the Digestive do.	3770	100	83	8	5	4	..	..	3670	2231	590	19	5	8	817
F. of the Urinary do.	188	16	9	5	..	2	..	..	172	75	39	3	..	..	55
G. of the Reproductive do.....	1420	41	14	23	2	..	2	..	1379	524	523	9	..	7	316
H. of the Locomotive do.....	1153	89	62	22	4	..	1	..	1064	407	276	19	1	11	350
I. of the Integumentary do..	1230	31	27	3	1	..	..	..	1199	647	263	3	..	3	283
Class 3.—Diseases from External causes	340	30	26	4	..	..	..	..	310	243	26	6	..	2	33
Diseases unspecified.....	586	..	..	..	..	..	..	..	586	60	20	..	..	4	502
Totals.....	21160	1172	817	231	40	55	28	1	19988	9943	4415	185	57	105	5283

	Total of cases treated.	IN-PATIENTS.							OUT-PATIENTS.						
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Class 1.—Zymotic or Contagious Diseases.															
Variola	11	6	4	..	2	..	..	..	5	5	..	..	..	..	..	..
Varicella	5	1	1	..	..	..	..	..	4	4	..	..	..	..	..	..
Vaccinia	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Miliaria	8	..	..	..	..	..	..	..	8	7	..	1	..	..	..	..
Scarlatina	43	..	..	..	..	..	..	..	43	38	2	3	..	..	..	..
Rubeola	57	..	..	..	..	..	..	..	57	51	1	4	..	..	..	1
Roseola	2	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..
Cynanche Parotidea.....	41	3	2	..	..	..	1	..	38	29	4	5	..	..	..	..
Pertussis	249	1	1	..	..	..	..	..	248	195	15	31	2	3	..	2
Aphthæ	16	..	..	..	..	..	..	..	16	11	2	2	..	..	..	1
Diarrhœa	790	20	15	5	..	..	..	..	770	622	42	92	3	1	2	8
" Choleraic	121	5	5	..	..	..	..	..	116	107	..	4	..	1	4	..
" Dysenteric	24	1	1	..	..	..	..	..	23	18	5	..	..	..	..	..
Dysentery	66	10	8	..	..	2	..	..	56	46	1	7	1	..	1	..
Cholera	63	34	26	..	..	7	1	..	29	24	..	2	..	3	..	..
Influenza	34	1	1	..	..	..	..	..	33	27	2	4	..	..	..	..
Purpura	10	3	3	..	..	..	..	..	7	3	..	..	2	1	1	..

Class I.—A *continued.*	Total of Cases treated.	IN-PATIENTS. Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	OUT-PATIENTS. Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Fever	147	49	45	..	..	2	1	1	98	70	1	19	7	..	..	1
„ Intermittent	19	3	3	..	..	..	..	..	16	9	3	3	1	..	..	..
„ Remittent	9	..	..	..	..	..	..	..	9	6	..	2	.	1	..	..
„ Gastric and Bilious	60	40	38	..	..	..	2	..	20	12	..	6	2	..	..	..
„ Typhus and Typhoid	55	38	32	..	..	6	..	..	17	8	..	3	4	2	..	..
Acute Rheumatism	99	80	74	3	..	..	1	2	19	14	1	..	4	..	..	..
Syphilis, Primary	53	12	11	..	1	..	..	..	41	21	4	14	2	..	..	..
„ Secondary	92	4	3	1	..	..	..	..	88	37	28	19	2	..	..	2
Gonorrhœa	151	3	3	..	..	..	..	..	148	109	12	27	..	..	..	..
Gleet	29	..	..	..	..	..	..	..	29	11	7	9	1	..	..	1
Erysipelas	115	43	42	..	..	1	..	..	72	49	8	10	5	..	..	..
Necusia	5	..	..	..	..	..	..	..	5	3	..	2	..	..	..	..
Porrigo	148	..	..	..	..	..	..	..	148	90	34	22	..	..	..	4
Scabies	47	..	..	..	..	..	..	..	47	32	7	8	..	..	..	..
Class II.—Sporadic Diseases.																
A.—*Sporadic Diseases of uncertain or variable seat.*																
Epistaxis	9	..	..	..	..	..	..	..	9	6	3	..	..	..	..	..
Hæmatemesis	15	..	..	..	..	..	..	..	15	9	5	1	..	..	..	..
Hæmoptysis	90	9	5	3	..	1	..	..	81	33	24	20	3	..	..	1
Melæna	5	..	..	..	..	..	..	..	5	5	..	..	..	..	..	..
Hæmaturia	14	3	2	..	..	..	1	..	11	6	4	1	..	..	..	..
Menorrhagia	117	5	4	1	..	..	..	..	112	70	13	25	..	..	..	4
Anæmia	35	1	1	..	..	..	..	..	34	19	10	4	..	..	..	1
Chlorosis	107	4	1	3	..	..	..	..	103	39	51	9	1	..	..	3
Dropsy	26	7	5	1	..	1	..	..	19	7	8	2	1	..	..	1
Anasarca and Œdema	49	6	5	1	..	..	..	..	43	11	19	10	..	2	..	1
Ascites	22	2	1	..	..	1	..	..	20	9	4	6	1	..	..	..
Hydrocele	11	4	3	1	..	..	..	..	7	1	3	2	1	..	..	..
Ovarian Dropsy	16	..	..	..	..	..	..	..	16	..	13	3	..	..	..	..
Hydrocephalus Chronic	5	..	..	..	..	..	..	..	5	3	1	1	..	..	..	..
Abscess	276	37	35	1	..	1	..	..	239	187	14	25	9	..	1	3
Bubo	13	4	3	1	..	..	..	..	9	5	..	1	3	..	..	..
Furunculus	175	5	5	..	..	..	..	..	170	138	18	8	4	..	..	2
Carbuncle	20	9	8	1	..	..	..	..	11	9	1	..	..	..	..	1
Ulcer	278	51	36	15	..	..	..	..	227	96	57	59	5	..	9	1
Sinus	33	2	2	..	..	..	..	..	31	8	8	15	..	..	..	..
Caries	92	9	3	6	..	..	..	..	83	15	39	25	1	..	1	2
Fistula	13	2	..	2	..	..	..	..	11	1	3	6	1	..	..	..
„ in Ano	26	3	2	..	1	..	..	..	23	7	8	7	1	..	..	..
Glandular Disease	127	3	3	..	..	..	..	..	124	67	14	37	1	..	1	4
Scrofula	260	6	1	3	1	1	..	..	254	71	105	70	..	4	1	3
Scrofulous Abscess	33	4	2	1	..	1	..	..	29	11	13	5	..	..	..	..
„ Ulcer	13	..	..	..	..	..	..	..	13	6	2	4	..	1	..	..
Tabes Mesenterica	115	1	..	1	..	..	..	..	114	44	25	31	..	13	..	1
Rachitis	59	1	..	1	..	..	..	..	58	12	19	26	..	1	..	..
Bronchocele	19	..	..	..	..	..	..	..	19	6	7	2	..	..	..	..

Class II.—A *continued.*	Total of Cases treated.	IN-PATIENTS.						OUT-PATIENTS.						
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-patients.	Died.	Dismissed unaltered.	Under treatment.
Podagra	17	1	1	..	..	..	..	..	16	6	3	6	..	..	..	1
Cancer	76	7	..	1	5	1	..	..	69	..	49	19	..	..	1	..
Tumour	113	6	3	1	2	..	..	..	107	31	33	35	..	..	2	6
Polypus	34	2	1	..	1	..	..	..	32	5	21	6	..	..	..	..
Atrophy	33	1	1	..	..	..	..	..	32	13	10	9	..	..	..	..
Cachexia	32	..	..	..	..	..	..	..	32	15	9	7	..	..	..	1
Debility	207	3	..	2	..	..	1	..	204	112	41	46	1	..	..	4
Gangrene	6	4	1	..	..	3	..	..	2	..	..	..	2	..	..	..
Sycosis	9	1	..	1	..	..	..	..	8	5	1	1	..	..	1	..
Condylomata	10	..	..	..	..	..	..	..	10	4	1	5	..	..	..	..
Helminthiasis	473	3	3	..	..	..	..	..	470	321	57	85	..	..	..	7
Tænia	55	..	..	..	..	..	..	..	55	14	26	11	1	..	1	2
Induration of Areolar Tissue	5	2	..	..	1	..	1	..	3	..	..	3	..	..	..	..
Fungoid Growths	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Hare-lip	3	..	..	..	..	..	..	..	3	..	..	..	..	..	3	..
Class II. B.—*Sporadic Diseases of the Nervous System and Organs of Sense.*																
Hydrocephalus, Acute	17	..	..	..	..	..	..	..	17	7	4	6	..	..	..	..
Arachnitis	10	..	..	..	..	..	..	..	10	1	7	2	..	..	..	..
Tuberculous Phrenitis	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Myelitis	2	2	..	..	..	..	..	..	2	..	..	2	..	..	..	..
Ramollissement of Nerv. centres	6	4	..	1	1	2	..	..	2	..	2	..	..	..	..	..
Paralysis	138	8	3	5	..	..	..	..	130	11	78	35	3	..	1	2
,, Agitans	4	1	..	1	..	..	..	..	3	..	3	..	..	..	..	..
,, Hemiplegia	25	3	1	2	..	..	..	..	22	3	6	12	1	..	..	..
,, Paraplegia	7	..	..	..	..	..	..	..	7	..	1	4	..	..	..	2
Partial Anæsthesia	2	..	..	..	..	..	..	..	2	..	2	..	..	..	..	..
Mania	2	..	..	..	..	..	..	..	2	1	..	..	..	1	..	..
Melancholia	13	1	1	..	..	..	..	..	12	2	2	7	..	..	1	..
Amentia	3	..	..	..	..	..	..	..	3	1	..	1	..	..	..	1
Dementia	16	1	..	1	..	..	..	..	15	3	4	7	..	..	1	..
Delirium Tremens	7	2	2	..	..	..	..	..	5	1	4	..	..	..	..	..
Epilepsy	220	11	7	1	2	1	..	..	209	29	100	67	4	..	2	7
Apoplexy	3	2	..	1	..	1	..	..	1	..	1	..	..	..	..	..
Cerebral Congestion	55	6	6	..	..	..	..	..	49	29	11	9	..	..	..	..
,, Affection	29	..	..	..	..	..	..	..	29	5	21	3	..	..	..	..
Cephalalgia	672	1	1	..	..	..	..	..	671	393	111	156	..	..	2	9
Vertigo	97	..	..	..	..	..	..	..	97	49	19	27	..	..	1	1
Chorea	35	5	2	2	..	..	1	..	30	13	5	8	1	..	2	1
Hysteria	196	8	2	6	..	..	..	..	188	86	56	38	1	..	2	3
Spinal Irritation	37	3	2	1	..	..	..	..	34	8	16	10	..	..	..	..
Spasms	22	3	2	..	..	..	1	..	19	11	3	4	..	..	..	1
Convulsions	28	..	..	..	..	..	..	..	28	17	5	5	..	1	..	..
Laryngismus Stridulus	8	..	..	..	..	..	..	..	8	3	2	1	..	..	..	..
Neuralgia	157	4	2	1	..	..	..	..	153	53	38	57	1	..	2	7
Neuroma	2	..	..	..	..	..	..	..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Ophthalmia	510	10	10	4	..	..	..	..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Retinitis	10	..	..	..	..	..	..	..	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Class II.—B *continued.*	Total of Cases treated.	IN-PATIENTS.							OUT-PATIENTS.						
		Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Amaurosis and Amblyopia	129	2	..	..	2	..	..	..	127	12	72	35	..	..	6	2
Myopia	5	..	..	..	..	..	..	..	5	..	3	2	..	..	..	..
Presbyopia	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
Hemeralopia	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Nyctalopia	4	..	..	..	..	..	..	..	4	..	4	..	..	..	..	..
Cataract	55	6	..	6	..	..	..	..	49	1	27	15	2	..	3	1
Iritis	18	5	1	4	..	..	..	..	13	7	2	2	..	..	2	..
Corneitis	31	1	..	..	..	..	1	..	30	13	10	7	..	..	..	..
Opacity of Cornea	30	1	..	1	..	..	..	..	29	12	7	9	..	..	..	1
Sclerotitis	5	..	..	..	..	..	..	..	5	1	4	..	..	..	..	..
Lippitudo and Ectropium	11	1	..	1	..	..	..	..	10	4	4	1	1	..	..	..
Hordeolum	11	..	..	..	..	..	..	..	11	10	..	1	..	..	..	..
Ozœna	30	..	..	..	..	..	..	..	30	12	9	7	..	..	..	2
Otitis	7	..	..	..	..	..	..	..	7	7	..	..	..	..	..	..
Tinnitus Aurium	8	..	..	..	..	..	..	..	8	7	1	..	..	..	..	..
Dysecœia	130	..	..	..	..	..	..	..	130	31	57	38	..	..	4	..
Otorrhœa	88	..	..	..	..	..	..	..	88	39	25	23	..	..	..	1
Nervous Affection	47	..	..	..	..	..	..	..	47	17	16	13	..	..	..	1
Catalepsy	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Otalgia	7	..	..	..	..	..	..	..	7	6	..	1	..	..	..	..
Strabismus	3	..	..	..	..	..	..	..	3	1	2	..	..	..	..	..
Drowsiness	2	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..
Puerperal Mania	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Class II. C.—*Sporadic Diseases of Circulatory System.*																
Heart Disease	185	15	2	4	2	3	4	..	170	10	103	45	3	2	4	3
Pericarditis	20	7	2	3	1	1	..	..	13	1	6	2	2	..	2	..
Endocarditis	3	2	..	1	..	1	..	..	1	..	..	..	..	1	..	..
Hydropericardium	2	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..
Aneurism	8	..	..	..	..	..	..	..	8	..	5	2	..	..	..	1
Phlebitis	15	5	2	3	..	..	..	..	10	2	2	5	..	..	..	1
Varicose Veins	75	1	..	1	..	..	..	..	74	20	29	22	..	..	..	3
Angina Pectoris	8	..	..	..	..	..	..	..	8	..	5	3	..	..	..	..
Syncope	7	..	..	..	..	..	..	..	7	4	..	2	..	..	..	1
Palpitation of Heart	49	..	..	..	..	..	..	..	49	12	16	20	..	..	..	1
Irritable Heart	3	..	..	..	..	..	..	..	3	1	..	2	..	..	..	..
Cyanosis	2	..	..	..	..	..	..	..	2	..	1	..	..	..	..	1
Class II. D.—*Sporadic Diseases of the Respiratory System.*																
.....	5	1	..	..	..	..	1	..	4	3	..	1	..	..	..	..
.....	53	10	2	4	1	2	1	..	43	8	11	22	2	..	..	..
.....	936	50	47	2	..	..	1	..	886	567	92	199	13	4	..	11
.....	442	22	2	20	..	..	..	..	420	107	207	103	..	..	..	3
.....	469	1	1	..	..	..	..	..	468	334	32	97	1	..	..	..
...	17	..	..	..	..	..	..	..	17	12	..	3	..	..	..	..
	63	21	19	..	..	..	2	..	42	22	3	9	3	3	..	2

Class II.—D *continued.*	Total of Cases treated.	IN-PATIENTS. Total of In-Patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	OUT-PATIENTS. Total of Out-patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Hepatization of Lungs	8	2	1	..	..	1	..	..	6	2	2	2	..	..	..	..
Congestion of Lungs	4	2	2	..	..	..	..	..	2	..	2	..	..	..	..	..
Paralysis of Lungs	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Pleuritis	45	7	5	..	..	..	2	..	38	27	1	9	1	..	..	..
Pleurodynia	72	4	4	..	..	..	..	..	68	43	10	14	1	..	..	..
Emphysema	8	1	..	1	..	..	..	..	7	1	2	3	1	..	..	..
Asthma	149	..	..	..	..	..	..	..	149	21	71	53	..	..	1	3
Dyspnœa	22	..	..	..	..	..	..	..	22	9	5	8	..	..	..	..
Phthisis	502	46	7	27	5	7	..	..	456	18	260	144	8	6	10	10
Pulmonary Disease	6	1	..	1	..	..	..	..	5	..	5	..	..	..	..	..
Cough	386	..	..	..	..	..	..	..	386	231	34	111	1	..	1	8
Aphonia	19	..	..	..	..	..	..	..	19	11	3	4	..	..	..	1
Class II. E.—*Sporadic Diseases of the Digestive System.*																
Dentition	159	..	..	..	..	..	..	..	159	123	16	19	..	..	..	1
Cancrum Oris	4	1	..	..	..	1	..	..	3	2	..	1	..	..	..	..
Glossitis	3	1	1	..	..	..	..	..	2	1	..	1	..	..	..	..
Stomacace	44	1	1	..	..	..	..	..	43	33	2	7	..	..	..	1
Ptyalism	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Odontalgia	76	1	1	..	..	..	..	..	75	59	9	7	..	..	..	..
Prosopalgia	91	3	3	..	..	..	..	..	88	75	2	9	2	..	..	..
Tonsillitis	103	6	6	..	..	..	..	..	97	71	11	12	..	..	..	3
Angina	190	22	22	..	..	..	..	..	168	125	9	30	2	1	..	1
Pharyngitis	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Dysphagia	5	..	..	..	..	..	..	..	5	1	..	4	..	..	..	..
Gastritis	140	13	13	..	..	..	..	..	127	79	23	24	1	..	..	..
,, Chronic	83	4	4	..	..	..	..	..	79	39	19	21	..	..	..	..
Gastralgia	86	4	4	..	..	..	..	..	82	51	13	16	..	..	1	1
Dyspepsia	1825	2	..	2	..	..	..	..	1823	1143	292	351	2	..	3	32
,, Acute	50	..	..	..	..	..	..	..	50	38	2	9	..	..	1	..
Cardialgia	27	..	..	..	..	..	..	..	27	15	6	6	..	..	..	..
Anorexia	7	..	..	..	..	..	..	..	7	6	..	..	..	..	..	1
Bulimia	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Pyrosis	37	..	..	..	..	..	..	..	37	23	5	8	..	..	..	1
Pyloric Disease	7	2	..	..	1	1	..	..	5	1	1	2	..	..	1	..
Chronic Vomiting	34	1	1	..	..	..	..	..	33	18	11	3	..	..	..	1
Enteritis	5	..	..	..	..	..	..	..	5	4	..	1	..	..	..	..
Peritonitis	14	9	7	1	..	1	..	..	5	2	1	..	1	1	..	..
Enterodynia	22	1	1	..	..	..	..	..	21	12	3	6	..	..	..	..
Colic	30	1	1	..	..	..	..	..	29	19	4	5	..	..	..	1
Chronic Dysentery	8	2	..	..	2	..	..	..	6	3	1	1	..	..	..	1
Ulceration of Intestines	2	2	1	..	..	1	..	..	..	..	..	..	..	..	..	..
Constipation	80	1	1	..	..	..	..	..	79	38	8	31	..	..	..	2
Hernia	30	..	..	..	..	..	..	..	30	6	7	15	..	1	1	..
Stricture and Disease of Rectum	20	..	..	..	..	..	..	..	20	7	3	9	..	1	..	..
Prolapsus Ani	54	1	..	1	..	..	..	..	53	33	16	4	..	..	..	..
Blennorrhœa Recti	2	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..
Hæmorrhoids	201	2	1	1	..	..	..	..	199	113	42	37	3	..	..	4
Hepatitis	33	4	4	..	..	..	..	..	29	15	6	7	..	..	..	1

Class II.—G *continued.*	Total of Cases treated.	IN-PATIENTS. Total of In-patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	OUT-PATIENTS. Total of Out-patients.	Cured.	Relieved.	Result unknown.	Admitted In-patients.	Died.	Dismissed unaltered.	Under treatment.
Hepatitis Chronic	69	3	3	..	..	..	..	..	66	23	26	14	1	..	..	2
Hepatic Abscess	2	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Chronic Induration of Liver	3	1	..	1	..	..	..	..	2	..	..	1	1	..	..	..
Icterus	55	8	6	..	2	..	..	..	47	19	18	4	4	..	1	1
Hepatic Congestion	24	..	..	..	..	..	..	..	24	9	6	9	..	..	..	..
Hepatic Derangement	18	..	..	..	..	..	..	..	18	11	..	7	..	..	..	..
Hypochondriasis	41	2	..	2	..	..	..	..	39	6	20	10	..	..	..	3
Splenic Disease	11	..	..	..	..	..	..	..	11	2	5	3	1	..	..	..
Abdominal Congestion	6	..	..	..	..	..	..	..	6	4	1	1	..	..	..	..
Class II. F.—*Sporadic Diseases of the Urinary System.*																
Nephritis	4	1	1	..	..	..	..	..	3	3	..	..	..	..	..	..
Renal Abscess	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Nephria	10	1	..	..	..	1	..	..	9	..	3	3	2	..	..	1
Diabetes	15	4	1	3	..	..	..	..	11	1	8	1	..	..	..	1
Enuresis	37	1	1	..	..	..	..	..	36	22	9	5	..	..	..	..
Dysuria	27	..	..	..	..	..	..	..	27	11	3	13	..	..	..	..
Retention of Urine	12	1	1	..	..	..	..	..	11	8	..	2	1	..	..	..
Cystitis	19	1	1	..	..	..	..	..	18	10	1	5	1	..	..	1
Vesical Catarrh	3	..	..	..	..	..	..	..	3	2	..	1	..	..	..	..
Calculus Vesicæ	6	..	..	..	..	..	..	..	6	3	1	2	..	..	..	..
Lithiasis	5	..	..	..	..	..	..	..	5	2	..	3	..	..	..	..
Prostatitis	7	3	1	1	..	1	..	..	4	1	2	..	..	..	..	1
Stricture of Urethra	16	..	..	..	..	..	..	..	16	2	9	3	..	..	..	2
Nephralgia	3	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..
Paralysis Vesicæ	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Urethritis	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Urinary Disease	16	1	1	..	..	..	..	..	15	7	3	5	..	..	..	..
Class II. G.—*Sporadic Diseases of the Reproductive System.*																
Orchitis	29	6	6	..	..	..	..	..	23	8	3	9	3	..	..	..
Hæmatocele	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Non-descent of Testes	2	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..
Spermatorrhœa	35	1	1	..	..	..	..	..	34	12	14	6	..	..	2	..
Impotence	4	..	..	..	..	..	..	..	4	3	..	1	..	..	..	..
Balanitis	2	..	..	..	..	..	..	..	2	1	1	..	..	..	..	..
Paraphymosis	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Oöphoritis	43	5	..	4	1	..	..	..	38	12	22	2	2	..	..	..
Ovarian Disease	55	1	..	1	..	..	..	..	54	3	38	12	..	..	..	1
Sterility	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Uterine Disease	397	18	1	16	..	..	1	..	379	94	233	42	1	..	..	9
Metritis	31	5	4	1	..	..	..	..	26	14	8	3	..	..	..	1
„ Chronic	41	2	1	1	..	..	..	..	39	16	12	7	..	..	..	4
Paramenia	321	..	..	..	..	..	..	..	321	158	66	86	1	..	..	10
Prolapsus Uteri	101	1	..	..	..	..	1	..	100	33	40	21	..	..	2	4
Leucorrhœa	128	..	..	..	..	..	..	..	128	72	24	29	1	..	..	2

Class II.—G *continued.*	Total of Cases treated.	IN-PATIENTS. Total of In-patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	OUT-PATIENTS. Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-patient.	Died.	Dismissed unaltered.	Under treatment.
Vaginitis	11	..	..	..	..	..	..	..	11	8	1	2	..	..	..	..
Disordered Gestation	27	..	..	..	..	..	..	..	27	15	7	3	..	..	1	1
Threatened Abortion	17	..	..	..	..	..	..	..	17	7	6	2	..	..	2	..
Inflammation of Labia	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Mastitis	37	1	1	..	..	..	..	..	36	27	2	6	..	..	..	1
Hypertrophia Mammæ	4	..	..	..	..	..	..	..	4	4	..	..	..	..	..	..
Morbid Lactation	10	..	..	..	..	..	..	..	10	7	2	1	..	..	..	..
Mastodynia	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Climacteric Disease	91	1	..	..	1	..	..	..	90	26	44	16	..	..	..	4
Class II.																
H.—*Sporadic Diseases of the Organs of Locomotion.*																
Arthritis	25	3	3	..	..	..	..	..	22	10	5	6	1	..	..	..
Hydrarthra	12	..	..	..	..	..	..	..	12	6	2	4	..	..	..	..
Disease of Joints	39	10	5	5	..	..	..	..	29	7	4	13	1	..	2	2
Ankylosis	2	..	..	..	..	..	..	..	2	..	..	..	..	..	1	1
Synovitis	28	..	..	..	..	..	..	..	28	5	19	4	..	..	..	..
Housemaid's Knee	15	8	7	..	..	..	..	1	7	4	1	1	1	..	..	..
Bursitis	13	1	1	..	..	..	..	..	12	4	4	4	..	..	..	..
Necrosis	22	5	1	3	1	..	..	..	17	4	9	3	..	..	..	1
Periostitis	25	4	3	..	1	..	..	..	21	5	7	8	..	1	..	..
Exostosis	10	1	..	..	1	..	..	..	9	..	1	5	..	3	..	..
Contracted Tendon	7	..	..	..	..	..	..	..	7	..	3	4	..	..	..	..
Spinal Curvature	11	..	..	..	..	..	..	..	11	1	4	5	..	..	..	1
Rheumatism S. Acute	493	21	19	2	..	..	..	..	472	208	89	158	8	..	2	7
„ Chronic	199	14	8	6	..	..	..	..	185	44	96	43	..	..	2	..
Lumbago	82	1	1	..	..	..	..	..	81	56	6	17	..	..	1	1
Sciatica	122	19	12	5	1	..	1	..	103	42	24	29	5	..	2	1
Coxalgia	13	2	1	1	..	..	..	..	11	5	1	4	..	..	1	..
Mollities Ossium	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Growing Pains	3	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..
Chondritis	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Inflamed Foot	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..
Flat Foot	2	..	..	..	..	..	..	..	2	1	..	1	..	..	..	..
Wry Neck	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Class II.																
I.—*Sporadic Diseases of the Integumentary System.*																
Skin Disease	73	..	..	..	..	..	..	..	73	32	23	17	..	..	..	1
Urticaria	44	1	1	..	..	..	..	..	43	30	5	8	..	..	..	..
Eczema	248	12	9	2	1	..	..	..	236	139	34	58	..	..	1	4
Herpes	88	..	..	..	..	..	..	..	88	57	10	18	..	..	1	2
„ Zoster	8	2	2	..	..	..	..	..	6	5	..	1	..	..	..	..
„ Circinnatus	27	..	..	..	..	..	..	..	27	20	3	4	..	..	..	..
Crusta Lacta	18	..	..	..	..	..	..	..	18	12	4	2	..	..	..	..
Pemphigus	9	..	..	..	..	..	..	..	9	9	..	..	..	..	..	..
Rupia	6	..	..	..	..	..	..	..	6	4	..	2	..	..	..	..
Ecthyma	14	1	1	..	..	..	..	..	13	7	4	1	1	..	..	..

Class II.—I *continued.*	Total of Cases treated.	IN-PATIENTS.							OUT-PATIENTS.						
		Total of In-patients.	Cured.	Relieved.	Dismissed unaltered.	Died.	Dismiss'd for irregularity	Under treatment.	Total of Out-Patients.	Cured.	Relieved.	Result unknown.	Admitted In-Patients.	Died.	Dismissed unaltered.	Under treatment.
Impetigo	62	1	1	..	..	..	..	..	61	41	10	10	..	..	..	..
Acne	59	..	..	..	..	..	..	..	59	27	10	19	..	..	1	2
Lichen	11	..	..	..	..	..	..	..	11	7	..	3	1	..	..	..
Prurigo	65	..	..	..	..	..	..	..	65	33	8	20	..	..	..	4
Lepra	32	..	..	..	..	..	..	..	32	9	18	5	..	..	..	..
Psoriasis	215	..	..	..	..	..	..	..	215	80	89	42	..	..	..	4
Rhagades	7	..	..	..	..	..	..	..	7	1	5	1	..	..	..	..
Pityriasis	45	1	1	..	..	..	..	..	44	27	15	2	..	..	..	..
Lupus	7	..	..	..	..	..	..	..	7	6	1	..	..	..	..	..
Erythema	16	1	..	1	..	..	..	..	15	9	5	1	..	..	..	..
" Nodosum	14	3	3	..	..	..	..	..	11	8	2	1	..	..	..	..
Paronychia	80	7	7	..	..	..	..	..	73	58	5	8	1	..	..	1
Inverted Toe Nail	3	2	2	..	..	..	..	..	1	1	..	..	..	..	..	..
Intertrigo	14	..	..	..	..	..	..	..	14	9	4	1	..	..	..	..
Excoriation	8	..	..	..	..	..	..	..	8	5	..	3	..	..	..	..
Plica Polonica	2	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..
Alopecia	10	..	..	..	..	..	..	..	10	6	..	4	..	..	..	..
Nævus	3	..	..	..	..	..	..	..	3	..	..	3	..	..	..	..
Abnormal Perspiration	3	..	..	..	..	..	..	..	3	1	..	2	..	..	..	..
Tinea Capitis	11	..	..	..	..	..	..	..	11	8	1	2	..	..	..	..
Ephelis	3	..	..	..	..	..	..	..	3	2	1	..	..	..	..	..
Class III.—Diseases from External Causes.																
Accidents, &c.	272	23	21	2	..	..	..	..	249	213	9	16	5	..	2	4
Pernio	26	2	2	..	..	..	..	..	24	20	3	1	..	..	..	..
Medicinal Diseases and Poisonings	41	5	3	2	..	..	..	..	36	10	14	10	1	..	..	1
Diseases not specified	585	..	..	..	..	..	..	..	585	60	20	473	..	..	4	28

Dr. Horner and the Hull Infirmary.

When the allopathic medical men of England, represented by some three hundred members of the Provincial Medical and Surgical Association, assisted by the Presidents of the Royal Colleges of Physicians and Surgeons, met together in solemn conclave at Brighton,

in August 1851, and passed those famous resolutions, since known to the world as the "Brighton Protest against Homœopathy," doubtless each assistant at that renowned meeting went home satisfied that he had helped to inflict a mortal blow on the rising heresy, and that from that memorable 14th August, 1851, would date the rapid and irretrievable decline of the obnoxious system of Hahnemann.

Our readers will remember that these resolutions denounced homœopathy as utterly opposed to science and common sense, declared its practitioners unworthy to be or to remain members of the association, and decreed that it was derogatory to the honour of members to hold any kind of professional intercourse with homœopathic practitioners. At the time * we exposed the injustice and absurdity of these resolutions, and there is therefore no occasion to repeat the arguments we then used. We need hardly say that we did not fear those fatal consequences to homœopathy from this protest which its framers and subscribers hoped and expected. We rather congratulated ourselves that the arguments of the collective wisdom of our opponents were summed up in a few abusive epithets applied to us, and a feeble and harmless bull of excommunication launched against us. Still the impotency of the act did not diminish its iniquity, nor, we may add, its cowardly character. Here was the allopathic profession of England, represented by its delegates and official heads, assembled to crush a small and struggling body of their colleagues, for having adopted, after careful enquiry, a method of practice which they believed to be more efficacious for the cure of disease than the system they had abandoned, and which their opponents rejected and denounced without examination. But homœopathy has been revenged on its enemies with a degree of poetical justice worthy of a melodrama. The gentleman who opened the proceedings of the Brighton Association as President was Dr. F. R. Horner, of Hull. This gentleman, who, in 1851, was, as it were, the mouthpiece and representative of the concentrated anti-homœopathic rancour of the English allopathists, appears in 1857 as the author of a pamphlet, entitled "Reasons for adopting the Rational System of Medicine"—by "rational system" implying homœopathy! What was to him in 1851 "utterly opposed to science and common sense," is in 1857 the "rational system." The homœopathists with whom in 1851 he declared it to be "derogatory to his honour to hold any kind of professional intercourse," have, in 1857, the satisfaction of

* Vol. ix, p. 649.

reckoning him one of themselves. The Nemesis that follows on evil deeds has overtaken the allopathic association in the person of its president when the act of injustice was perpetrated. Saul breathing vengeance against the prophets turns prophet himself. The position occupied in Hull by Dr. Horner, makes the triumph of homœopathy in his conversion more complete. His titles are set forth in the pamphlet before us; they are "Late President and Perpetual Vice-President of the British Medical and Surgical Association; Senior Physician to the Hull General Infirmary, and to the Hull Dispensary, &c., &c."

The public profession of homœopathy by one possessing all these appointments, could not fail to create a considerable sensation among those whose medical creed he had seceded from. We do not know how the British Medical and Surgical Association will act in the case of one who recently occupied such a prominent place among them. We wonder what the *British Medical Journal* which has found food for a three months' dreary controversy in the simple fact of Mr. Long, an allopathic surgeon (not a member of the Association by the way), having met in consultation Dr. Wilkin, a homœopathic physician, will make of the fact of a late President of the Association having actually embraced the obnoxious faith. Will it urge the immediate removal of the Perpetual Vice-President? But then how can a perpetual officer be removed? "Late perpetual" would never do; even the *British Medical Journal* must see the impossibility of abridging the eternity involved in the title. Must then the Association bear the infliction of this homœopathic vice-president as their patients bear a perpetual blister, with a perpetual grin of anguish? Truly we cannot guess how they can escape the dilemma of having for one of their principal officers an upholder of the very creed it is their principal business to denounce, or of committing the absurdity of deposing a perpetual office-bearer.

It would be an interesting problem in medical mathematics which we should like to refer to Professor Laycock for solution: if the case of Mr. Long, a gentleman unconnected with the Association, and who only met a homœopathist in consultation, occupied the continuous attention of that learned body in the pages of its weekly organ for three calender months, how long is the agitation caused by the formal secession to homœopathy of a distinguished member of the Association likely to last? But pending the answer to this proposition, other questions relating to Dr. Horner's other titles have been

raised and settled, and to these we shall now proceed to direct attention.

Being Physician to the Hull Infirmary, Dr. Horner was naturally anxious to introduce the system he had convinced himself was the best into that institution. To this end he addressed a letter to the Board of Management, of which the following is a copy:

"Hull, 23rd April, 1857.

"Dear Sir,—I beg to ask you, as chairman of the Infirmary Board of Management, if I can have two wards (one for men and one for women) allotted solely for my patients; and also if I can have homœopathic medicines dispensed for such patients, under the sole superintendence of one dispenser?

"My medical opinions having undergone an entire change, being now convinced by the study and practical inquiry into homœopathy that it is the true and best system of medical treatment, I am compelled by conscientious feelings to make this request.

"The separation of my patients from those treated on the old system I consider, on all accounts, both desirable and necessary. If my request cannot be complied with, I fear that I shall feel myself called upon to resign the office which I now hold. I shall in all things be anxious to promote the interests of the Infirmary.

"I am, dear Sir, yours very truly,

"F. R. Horner.

"To Henry Gibson, Esq."

This letter, announcing his conversion to homœopathy and his desire to introduce the system into the Infirmary, created, as was to be expected, a great sensation among the other medical men connected with the hospital, who, led on by Dr. Sandwith, the hero of Kars, discharged the following protest against Dr. Horner and his request:

"We, the undersigned medical officers of the Hull General Infirmary, beg to draw the attention of the weekly board to the anomaly of the senior physician having declared his conversion to the doctrines of homœopathy. We feel it to be our duty strongly to protest against the post now held by Dr. Horner being filled by an homœopathist, for the following reasons:—

"In the first place, we hold it to be impossible for a physician holding these doctrines to discharge his duties honourably and consistently with the claims and expectations of the great body of

subscribers, many of whom are in danger of being lost to the institution by persistence in the present anomalous course.

"Secondly, it is a great annoyance to our feelings to be associated with an individual who has departed from the principles of rational medicine, and with whom, therefore, consultation on any emergency is impossible.

"Thirdly, it is an injustice to the patients under Dr. Horner's care that they should be treated, if not homœopathically, yet in a manner unworthy of confidence, because his profession of homœopathy implies his distrust of the efficiency of those remedies which are alone employed in the hospital for the cure of disease.

"The above protest against Dr. Horner's retaining his post in this hospital will, we trust, induce the board to adopt such measures as will lead to that gentleman's speedy and honourable retirement."

This protest was signed by Dr. Sandwith, Sir Henry Cooper, Mr. Huntington, Dr. Dunn, and Mr. Craven, and is altogether a charming sample of medical wisdom. The declaration of his conversion to homœopathy by the senior physician is said to be "an anomaly," as it no doubt is for any allopath to be or to declare himself converted to anything. Still that is a curious state of mind which would regard as anomalous the adoption of a new system of medicine which experience has proved to be more efficacious for the cure of disease than the abandoned old one. But let that pass, and let us examine the reasons urged by the protesters against the retention of the post of senior physician by a homœopathist.

First. They hold it to be impossible for a physician holding these doctrines to discharge his duties honourably and consistently with the claims and expectations of the great body of subscribers. What should hinder a homœopathist from discharging his duties *honourably* we are at a loss to imagine. At least other homœopathists are considered, even by their opponents, capable of discharging their duties as hospital physicians honourably. Thus Sir John Forbes says of Fleischmann, "he is considered, by those who know him, as a man of honour and respectability." And the same might be said of Drs. Wurmb, Caspar, Tessier and others, who occupy situations analogous to that of Dr. Horner abroad and at home. They are "all honourable men," we believe, and therefore capable of performing their duties honourably. If Dr. Horner was capable of discharging his duties honourably when he practised according to a method which he now believes to be erroneous and productive of much evil,

why should he be incapable of discharging those duties honourably when he practises according to a method he has proved to his own satisfaction to be greatly more successful than that he formerly pursued? Do Dr. Sandwith and his coadjutors really believe the assertion of the drug vendor's organ, the *Lancet*, that all homœopathists are necessarily knaves and impostors, or do they merely desire to inflict a wanton insult on their colleague, who has had the patience to enquire into, and the courage to adopt a new and a better system of treatment than that they themselves pursue? We incline to the latter view, the more so as the remainder of the protest is expressed in such a manner as to show that a deliberate insult was intended to Dr. Horner.

As to the "claims and expectations of the great body of subscribers," all that they can claim is that the physicians they appoint shall cure the patients to the best of their ability; and they would doubtless expect that, if any of their medical officers should discover a better method of treatment, the patients should enjoy the benefit of it. If the subscribers were content with Dr. Horner's discharge of his duties during the 20 years of his connexion with the hospital, they surely would be the most unreasonable of men to feel dissatisfied with him the moment he begun to practise a mode of treatment which he believed, and which experience and statistics prove to be superior to that he had previously pursued. Moreover, if, as can easily be shewn is the case, this new method were not only more successful in the treatment of disease, but much more economical, the subscribers, who are mainly interested in the amount of good done by their money, and are mainly anxious to avoid heavy demands on their purses, would be insane to object to their old and tried physician effecting an economy in the funds at the same time that he cured more patients. Thus the claims and expectations of the subscribers would be all in favour of Dr. Horner.

But "secondly," and this should have been "firstly," for it is the main grievance of the protest, and without it there had been no protest—"it is a great annoyance to our feelings to be associated with an individual who has departed from the principles of rational medicine." It is such a common trick for the partisans of rival systems to arrogate each fo[illegible] "rational," that it is apt to make us su[illegible] tisans can only give [illegible]

Rasori, St. John Lo[illegible]

to the sole rational system, but they at least tell us what the principles of their system are, our opponents of the dominant school, however, dub their practice rational, but will not declare what its principles are. The fact is, as is well known to every one, their principles differ as much among each other as they do from the principles of homœopathy, and the only bond of union among them, the only principle on which they all agree is, to put down homœopathy if they can. They agree to tolerate the utmost diversity of principle and practice among themselves, provided homœopathy is eschewed. There never was a more flagrant piece of impudence than the assumption of the title "rational" for a system that admits of fifty different ways of treating the same disease, while it is denied to a system that has one simple natural rule for the treatment of every disease. Dr. A. may treat a certain disease with bloodletting, which Dr. B. treats with stimulants, Dr. C. with opiates, and Dr. D. with nothing at all; it would cause no "annoyance" to these four to be associated together in a hospital; but all would unite against Dr. E. if he treated the disease by means of a specific medicine given in a minute dose. The opposition to homœopathy of parties who are mutually so much opposed is surely most irrational, and is only explicable on the supposition that the opposing parties are actuated by prejudice only. It is an illustration of the old saw "Give a dog a bad name," &c. Yes, it is a "great annoyance" to be associated with any "individual" who has adopted a practice having such a very bad name among "*nous autres*" as homœopathy.

Mark the delicate irony of the epithet "individual" as applied to the senior physician by his junior colleagues. Dr. Sandwith, who confessed to being the author of the protest, declared "upon his honour as a gentleman," that he did not mean to be disrespectful to Dr. Horner in applying to him the word "individual." No, of course not, "individual" is as respectful a term as any physician, be he twenty times our senior, deserves, who has lost caste by touching the unclean thing homœopathy. No disrespect was implied, certainly not, the word "individual" was used merely in the "Pickwickian sense."

"Thirdly, it is an injustice to the patients." Ah! the patients
ll they are considered at all, but then they are
s to them is not to be held so important as the
ur feelings" occasioned by our association
ll, "thirdly, it is an injustice to the

patients under Dr. Horner's care that they should be treated, if not homœopathically, yet in a manner unworthy of confidence." Why unworthy of confidence? Supposing Dr. Horner were compelled to continue the treatment he had formerly pursued, would his treatment be then worse than it previously was? Would his acquisition of homœopathic knowledge drive all his allopathic art out of his head? Would learning something new cause him to forget the old? Is rational medicine a species of medical Bourbonism, where nothing is forgotten only on the condition that nothing is learned? One would think that if Dr. Horner was a good allopathist previously, he would now be a good allopathist *plus* his knowledge of homœopathy. But there could be no compulsion put on Dr. Horner to practise a worse system when he knew a better—indeed the compulsion would be all the other way, for he would be morally bound to do the best for his patients as long as he was connected with the hospital.

This leads us to the question of the rights and duties of physicians in general, and especially in their connexion with public institutions. No one questions the right and duty of the medical man to adopt any new remedy for a single disease, or any better mode of treatment for a class of indications that may be discovered. Such discoveries must constantly be taking place in a progressive science like medicine, which is as yet far from perfect, and the physician would be justly blamed were he to refuse to give to the patients over whom he is placed, and who have no choice but to submit to his treatment, the benefit of the new remedy or treatment. Thus he would not be justified in withholding chloroform during surgical operations. If this be true in respect to single remedies, it must be equally so in regard to a whole system of treatment, and if a physician is convinced by careful examination of the subject that more lives are saved—say in acute inflammations, as has been indisputably demonstrated—by the homœopathic treatment, he is not only justified but absolutely bound to adopt it; otherwise he is morally guilty of little else than murder, and it would be the greatest injustice towards the patients suffering from such diseases to refuse to give them the advantages of the homœopathic treatment.

Altogether this wonderful protest does not reflect much credit on its framer Dr. Sandwith, nor on those who subscribed it along with him. Dr. Sandwith no doubt proved himself a worthy member of the band of heroes at Kars, and we all give him our tribute of admiration in his proper place. But let him [illegible] to sully [illegible]

earned fame by acts of illiberality and paltry spite such as he has here displayed. It will be better for himself to be known as having contributed in his way to the gallant but unsuccessful defence of an untenable fortress, whither his duty led him, against an overpowering force, than as the aider and abettor of an onslaught of powerful enemies on a worthy colleague for acting according to his conviction and his clear duty. It is far better to bind up the wounds of brave soldiers than to inflict wounds upon a colleague by using expressions of studied insult towards him. Moreover, what can he know about homœopathy? He was not likely to learn much about it at Kars. Evidently his head has been turned by the applause he has received, and like many weak people who have attained notoriety in connexion with one subject, he thinks himself entitled to speak authoritatively upon all. The reputation he earned in connexion with the Eastern fortress may easily be blighted if he lends his name and influence to acts of oppression and party rancour, and Sandwith the hero of Kars may be eclipsed by Sandwith the bigot of Hull. And yet he might add lustre to his name by acting an opposite part to that he has elected, by studying and defending that homœopathy which he now ignorantly assails. The fame acquired in fighting for a new truth will outlive that gained in a combat for an old and worn-out state; at least the truth itself will live long after the Turkish empire has ceased to exist.

Dr. Sandwith and his friends were successful in inducing the weekly board of management to second them in their endeavour to oust Dr. Horner, as appears from the following extract from the Minutes of May 14th.

"The protest presented on May the 7th was read, and the medical officers of the hospital having retired, it was considered, and the following resolution moved by Mr. W. B. Garrick, and seconded by Mr. William Jackson, was carried unanimously: 'That in the judgment of this board it is highly detrimental to the interests of this hospital, that Dr. Horner, holding the opinions he professes, should continue one of its medical staff, and that the Secretary be instructed to send Dr. Horner a copy of the protest, and to request him to tender his resignation, on or before Thursday next, when [illegible] general board will be given, in case his resigna- [illegible] day.'"

[illegible]rded to Dr. Horner, who replied that it [illegible] This letter was read at the weekly

board of the 21st May, "whereupon," say the Minutes, "it was unanimously resolved that the Secretary be instructed to give notice in the newspapers, by advertisement, that a special general board be held on Monday, the 8th day of June, to consider and determine Dr. Horner's position in relation to this hospital."

In the mean time Dr. Horner wrote a pamphlet, giving his reasons for adopting the homœopathic mode of treatment. In this pamphlet, he says that for many years past he had ceased to believe in the propriety of the heroic and perturbative system of treatment, and was quite alive to the evils of drugging. Still he knew nothing about homœopathy, and all his prejudices were against it. However, its continued progress excited his attention, and he resolved to investigate it thoroughly. This investigation he commenced more with the expectation of discovering and exposing its fallacies, than of finding any good in it. He first diligently read and studied the best works on the subject, and he was astonished to find how ignorant he had been of what homœopathy really was. He next proceeded to test, by practice, the truth of the statements he had read. "In my practical enquiry into the powers of homœopathic remedies," he writes, "I resorted to every species of proof which I could devise, and of which the subject seemed capable." His experiments extended over a great variety and number of diseases, acute and chronic,—and the result was his conviction of the superiority of homœopathy over the ordinary mode of practice. This conviction led him to declare his belief, and to request those alterations in the infirmary arrangements which would enable him to give his patients the full benefit of homœopathy.

The result of this application was, as we have seen, the special meeting summoned to consider Dr. Horner's position.

The main speaker at this meeting was the Rev. H. W. Kemp, who led the assault against the new medical creed in true church militant style. Not that his speech had in it much of the distinguishing virtue of christianity, charity; but it was eminently distinguished for the fervid vein of bigotry and intolerance that pervaded it. We never heard of Mr. Kemp before, and know nothing of him, except what we gather from this speech, which is certainly not a favourable specimen of what ought to be the speech of a clergyman, or even of an educated gentleman on such an occasion.

He talks a great deal about common sense, but his common sense is merely that indifferentism which would save its possessor

the trouble of distinguishing right from wrong. It is that sort of common sense which does not care to ascertain if we are right in matters not too immediately concerning us, provided we adopt or profess the view of the majority. Here is a specimen of the clap-trap he makes use of:

"It appeared to him that Dr. Horner had stripped himself—reasonably and honorably—of those qualifications which enabled him to practise there as the senior physician, and that, *ipso facto*, the office was vacant. He would, he said, illustrate this. He held a church appointment on subscribing to the 39 Articles, and suppose he came to think that those Articles were untrue and irrational, would not that cause him to vacate the office?"

In order that there should be some analogy of Dr. Horner's appointment with his own, it would be necessary to show that Dr. Horner, on entering the Infirmary, had bound himself to some particular mode of practice on pain of losing his office if he departed from that; but of course no such obligation was incurred by any physician of any hospital in the world, nor would any hospital demand such a humiliating condition. The only obligation a medical man takes upon himself, the only article he subscribes to, is to do the best he can for his patients; and if, knowing a more successful mode of treatment, he practises one than is less successful, he is guilty of a dereliction of his duty. And this is the truth of the matter as regards the medical man, in spite of all the sophistries and special pleadings of the Rev. Mr. Kemp.

Here is a another specimen of his pulpit oratory:

"The next thing he would urge was, that in order that the institution might be efficiently conducted, and that it might have the confidence of the patrons and subscribers, it was necessary that they should have uniformity of practice."

We venture to say, that the Hull Infirmary is an exception to every similar institution in the country, if uniformity of practice there prevails; and we venture to say, that neither the Hull board of management, nor any other board connected with any other hospital, ever took any means of securing uniformity of practice among their medical officers. Possibly the present proceedings of the Hull board, resulting in the expulsion of Dr. Horner, have secured a certain amount of uniformity in the practice of their hospital, so that it is, or may be now, uniformly bad; but such is a kind of uniformity even

Mr. Kemp would not openly advocate, however much his eloquence may have contributed to secure it.

The Rev. Mr. Kemp concluded a long speech abounding with personalities, vulgarities, and sophistries, but with not a word about duty, conscience, or religion in it, though we should think the question of the positive destruction of a known percentage of lives annually is sufficiently solemn to rouse up the deepest sense of responsibility in the governor of a hospital and a minister of religion, by moving certain resolutions, the effect of which would have been to turn off an old and well-tried officer in the harshest and unkindest manner. Among other things these resolutions declared that the practice of the homœopathic system in the hospital by Dr. Horner would be injurious to the patients, which is a summary condemnation without trial we might not have been surprised to find proceeding from a select jury of allopathic doctors, but which comes very oddly from a clergyman who cannot be supposed to know anything about the merits of the rival systems. As Mr. Kemp is fond of appealing to common sense, we may state what we believe to be the common sense view of the matter. Dr. Horner has given long and sufficient proof of his capacity to judge allopathy. He has now studied and fairly tried homœopathy and pronounces it to be by far the better system of the two. Now even granting that his opponents' knowledge of allopathy was equal to his own, what do they know of homœopathy? What do they even profess to know? Nothing! Have they studied it as he has? Have they tested it as he has? No! Then surely his evidence is to be preferred to theirs, and as he has given proofs of his ability for years on the old system, it would be but justice to give him an opportunity of practising on the new system, for which he would not abandon his former practice unless he had had a fair opportunity of judging of their comparative merits, which he solemnly declares he has had, and which his opponents have confessedly not had. Then why should he not be allowed to keep the same number of beds as before? and if any of the poor patients object to being treated homœopathically (which they are not the least likely to do) it would be a very easy matter to make some arrangement whereby they might decline his treatment if they pleased.

Such we apprehend is the common sense, the only rational course for the governors of the hospital to pursue. But unfortunately *neither* common sense nor reason have any influence over persons

blinded by prejudice. There is no question which is the best system for the patients, nor what is just towards a zealous, efficient, and well-tried officer. Here is a mere cry of "Allopathy for ever! down with homœopathy!" just as reasonable and quite as disinterested as that ancient shout of "Great is Diana of the Ephesians!" The reverend orator constitutes himself the mouth-piece of the allopaths, and enacts the part of a clerical Demetrius. In doing so we think he is slightly exceeding his duty and assuming a responsibility of the extent of which he has probably no very clear idea. But he may guess it to be sufficiently great when we tell him that it has been demonstrated as clearly as a proposition in Euclid that a very considerable larger number of patients die of all acute diseases (the kind almost exclusively treated in hospital) under allopathy than under homœopathy. So that Mr. Kemp in assisting to expel homœopathy from the hospital and to rivet allopathy upon the "poor patients"—poor, indeed, with such kind friends—actually helps to effect a notable sacrifice of human lives, for which lives, as a guardian of the patients, he is morally responsible.

The upshot of the meeting was, that Dr. Horner at last resigned to avoid being turned out, and so ends the history of homœopathy in the Hull Infirmary for the present. In the meantime Dr. Horner's pamphlet is very extensively read everywhere, and we doubt not in due time it will bear fruits in the way of convincing others of the superiority of homœopathy and the injustice of the Hull authorities towards himself, and possibly give us an opportunity, at some future period, to add another page to the history of Homœopathy in Hull.

Before concluding, we may say a few words on the course we think should be pursued by a physician placed in the situation of Dr. Horner.

If placed in a position where he can assert the high dignity and autocracy of the physician, as for example in France, where the *concours* system obtains, and the medical officers of hospitals are officers of the state, with a vested interest in their position, won by merit, we think there can be no question that he should keep his place, as Dr. Tessier has done, in spite of all the opposition and petty cabals of medical bigots and enemies.

He might be justified in acting in the same way in England, and on his conversion to homœopathy quietly introduce it without saying a word about his change of views, and when his practice was objected to, as it would soon be, he might reply that he was elected with no [illegible]ge to practise either Galenism, Broussaisism, or Brownism, but

simply with the implied understanding that he was to do the best he could for his patients, and as he now believes homœopathy to be the best he only fulfils his duty by practising it.

But in this country where hospitals are supported by the voluntary contributions of the charitable, and are governed on constitutional principles, we think the best plan on the whole, for the physician whose views have undergone a change to homœopathy to pursue, is to declare his change of views, to resign, and to offer himself for re-election, just like a member of parliament when he accepts office. By persisting in remaining in his post after his change of views, he would not only find himself bothered by the active and passive opposition of colleagues, assistants and nurses, but the subscribers might be easily excited into taking vigorous measures, which might result in disagreeable consequences to himself, or permanent injury to the charity; for unless the whole subscribers agree, which is most improbable, the subscriptions must fall off. Whereas, were he to resign and offer himself for re-election, if an old and tried officer, like Dr. Horner, he might probably be re-elected, and then he might make his own terms as to the new arrangements required for the free exercise of the new system; and if his candidature should be unsuccessful, he might console himself with the reflexion, that though the time was not yet come for the acceptance of homœopathy by the public at large, his conduct had been such as to accredit the system with the thinking part of the community; and that at all events he had not imperilled the reputation of homœopathy by attempting to practise it in spite of the open and secret opposition of nurses and clerks, to whom he would have to trust to have his prescriptions carried out, and whose interest and pleasure it would be to thwart him on every occasion.

Dr. Fell's Cancer Caustic.

The publication of his long-promised work has allayed the agitation produced in the ranks of the old school by Dr. Fell's secret method of treating cancer. Dr. Fell's *modus operandi* is as follows: he removes the epidermis over the cancerous tumour by means of nitric acid, and applies to the denuded surface the following caustic:—

℞ Sanguinariæ Canadensis ℥ss vel ℥ j.
Chlorid. Zinci, ℥ss vel ℥ij.
Aquæ ℥vj.
Pulv. sem. Tritic. Hibern. q. s.

and form a paste of the consistence of treacle.

In the slough, produced after some days, various incisions are made, and into these strips of cloth spread with the caustic paste are inserted. The incisions are deepened, and a fresh application of the caustic is made every day, until the slough extends sufficiently deep. This takes from two to four weeks. In about a fortnight more the slough falls off, and the wound it leaves gradually heals up.

Should there be enlarged glands in connexion with the cancerous tumour, these are removed by an ointment composed as follows:—

℞ Sulph. Zinci ℥vj.
Sang. Canad. ℥ij.
Myricæ ceriferæ ℥ j.
Extr. opii aquos.
Extr. conii āā ʒvj.
Ung. cetaceæ ℥vj.
Et fiat unguent.

Alternately, every twelve hours, with the above is applied another ointment of the following composition:—

℞ Iod. Plumbi ʒj.
Glycerine ʒj.
Ung. cetaceæ ℥ij.

Ft. Ung.

Sanguinaria is given internally combined with $^1/_{16}$th to $^1/_{20}$th gr. of iodide of Arsenic, and one grain of extract of Cicuta; or in decoction combined with Taraxicum.

Dr. Fell attaches great importance to the presence of the Sanguinaria in his caustics and internal remedies; but of course there is no saying how much or how little it had to do with the results produced. These results, by the way, merely consist in the removal of the tumour, which has been often before effected by knife or caustic. It remains to be seen what (if any) curative effect the treatment of Dr. Fell has upon the constitutional disease, or if it is any better than other caustics, or than the knife, which is a less painful and more speedy method of removing tumours, if it is desirable to do so. Dr. Fell vaunts the safety, certainty, and painlessness of his procedure. Our own experience of his treatment is very limited, and is confined to the observation of one case of mammary tumour of doubtful character, in which the patient suffered ible martyrdom from Dr. Fell's applications, and died either e or shortly after the falling off of the slough.

The North American Journal of Homœopathy.

At the conclusion of their fifth vol. the editors congratulate themselves on the success of their undertaking, and we beg to add our felicitations on the able manner in which the *North American* has always been conducted. We have forborne to transfer to our pages any of its valuable and interesting articles, because we take it for granted that all our readers take it in also. If they do not, their's is the loss; and the best advice we can give them is that they order it immediately.

The editors make an earnest appeal to their medical brethren to furnish them with articles and papers, and complain of having too much labour thrown upon themselves on account of the laziness of those who have experience and knowledge to communicate, and who yet refrain from writing. If it be any consolation to our American fellow-labourers to know that others are in the same position with themselves, we may confess to them that the apathy they have to complain of, we suffer from too. Many of our ablest practitioners, brimful of knowledge and experience, never put pen to paper, but keep all this knowledge, like choice wine, bottled up for their own private use, and have not the generosity to share an occasional sip of it with their friends. The worst of it is that the vinous simile we have employed does not hold good throughout; for at their death no valuable cellar remains to console the survivors for their loss. Their knowledge perishes with them as provokingly as though the heirs should see the wine they expected to enjoy poured out as a grand libation on their departed friend's grave.

BOOKS RECEIVED.

A Letter addressed to Sir John Forbes on his "Nature and Art in the cure of disease," by Hugh Hastings, M.D., &c. Cheltenham, 1857.

A Few Words on Homœopathy and Homœopathic Hospitals, by W. T. Gairdner, M.D. Edinburgh, 1857.

First Report of the Clinical Hospital for diseases of Children in Manchester, by Drs. S. Merei and Whitehead.

Homœopathy. Reasons for adopting the rational system of Medicine, by F. R. Horner, M.D. Hull and York, 1857.

A brief Examination of Dr. Horner's reasons for adopting Homœopathy, by Kelburne King, M.D. London, Whittaker, 1857.

Note sur la Phthisie pulmonaire en Algerie, par le Dr. J. J Feuillet d'Alger. Paris, Bailliere, 1856.

Journal de la Société Gallicane.

The Monthly Homœopathic Review.

A Few Plain Words, which it is hoped may find favour with those in whom is vested the management of the Hull Infirmary, by Philalethes.

Wm. Davy & Son, Printers, 8 Gilbert Street, Oxford Street. [W.]

THE

BRITISH JOURNAL

OF

HOMŒOPATHY.

ERYTHROXYLON COCA,

By Dr. Cl. Müller.

In its present condition, the Materia Medica, without doubt, does not so much need an extensive addition of new remedies, as a more elaborate examination, and a more correct appreciation of the materials it already contains. It is, therefore, certain, that very important reasons, as well as unusual circumstances would have alone induced me to direct my attention to a foreign plant, hitherto unemployed as a remedy by the profession, the more so as the views of those persons do not seem to be entirely groundless, who maintain that, in general, each zone and country produces those remedies most suitable for the diseases of frequent occurrence in and peculiar to each region; and, therefore, by these means nature has, in a certain measure, provided against each danger, as well as furnished a mitigation of every evil. The following, among other reasons, led me to submit the medicinal virtues of Coca to an especial proving. Coca, as it is well known, belongs to that class of stimulants which like opium and hemp of Eastern nations, as well as the spirituous drinks of Europeans, has, by its use, become a national peculiarity of certain races: its employment is followed by intoxication and debauchery. The results of the misuse of Coca, like those attendant on Opium eating, are of such a peculiar and specific character, and

have been communicated by such excellent and correct observers, that we have abundant means of investigation into the remarkable powers of this plant. Apart from the constant results of the abuse of Coca, we have further a well authenticated fact that this plant when taken in moderation possesses, according to our chemico-physiological ideas, unusual and inexplicable tonic, satiating, not to say, nourishing properties, which enable the natives to make, for an incredible period, extraordinary efforts, and to support the most incredible fatigue, in spite of want of food and necessary rest. Lastly, the universally acknowledged reputation which the Coca enjoys as a preservative against the *puna*, and as a remedy for that disorder, is a proof that it possesses curative powers of a very unusual kind, and that its employment in similar diseases and affections may with reason be expected to be followed with like results.

These were the principal reasons which led me to think that a direct and strict proving of this very promising remedy would be highly desirable and advantageous to the Materia Medica, I therefore at once set to work. I obtained a sufficient quantity of Coca leaves from the homœopathic chemist of this place, as well as from Gruner of Dresden, from which I prepared a tincture. From the great distance of Peru, and in consequence of the insufficient commercial relations, the leaves must not by any means have been fresh, but probably had been for some years in a dried condition, a circumstance which must have had an injurious influence, for the Indians reject the Coca as much less powerful and active if it exceeds a year old. But some experiments made upon myself soon proved that though the leaves by being long in a dried state might probably have lost a portion of their activity, still they had not by any means fully, nor even in a great measure, lost their peculiar properties.

I was still further strengthened in my undertaking by witnessing the effects of the remedy in some patients (suffering from emphysema, asthma, and disease of the heart), to whom, relying on Tschudi's observations, I had given some doses of the 2nd and 3rd decimal dilution, which were followed, in several instances, by a surprising improvement of the dyspnœa.

Although the provings made by myself and other persons, most of them physicians, may have at present but little pretension to be perfect, yet they show an actual agreement with the observations and experiments made by naturalists in Peru, and united with the latter, do not, in my opinion, form so indistinct and uncertain a representation of the specific action of this plant, but that it may be therapeutically employed in certain determinate forms of disease.

The Coca (Erythroxylon Coca, Lam.) is a shrub about six feet high, with glossy green leaves and white flowers, the latter are succeeded by small scarlet berries. When the leaves are so brittle that they break on being bent, they are then stripped from the boughs, which are again covered with fresh leaves, according to Vitoc, in three or four months. The leaves are then dried in the sun, become smooth and of a dull green colour; moisture renders them mouldy and useless. The taste is not unpleasant, slightly bitter, somewhat aromatic, similar to bad green tea. The odour of the newly dried leaves when kept in a mass is almost overpowering, but when kept in bags, it is almost entirely lost. The Coca leaves have not yet been subjected to sufficient chemical analysis; only so much is known, that they are composed of three constituents: a resinous substance with a strong odour, a bitter substance (an alkaloid), and a kind of tannic acid.

1st. *The Resinous Substance.*—The leaves which are brought to Europe are covered or filled with a resinous or waxy substance, sparingly soluble in water, but entirely so in Ether. When digested for a longer time in Ether, a fine dark green solution is obtained, which evaporated in the open air, leaves behind a brownish resin possessing a strong, peculiar, and penetrating odour. On longer exposure to the atmosphere, it diminishes in bulk, gradually loses its odour, and becomes a greasy, and almost inodorous mass. Ether thus extracts from the leaves at least two substances, one of which is very volatile, of a strong odour, and probably possessing the narcotic principle of the leaf. This opinion at least accords with the assertion of the Coqueros, who consider that the leaves gradually lose their odour and power, and are usually of little value after twelve months.

2nd. *The Alkaloid.*—Alcohol extracts a bitter principle, but which is uncrystallizable, and has not hitherto been procured in a state of purity. It is highly probable that the activity of Coca depends upon this constituent.

3rd. *Tannic Acid.*—This gives a black colour to solutions of Salts of Iron in the same manner as the Tannic Acid obtained from tea.

The proportions in which these three different constituents exist in the Coca leaves have not yet been determined.—(J. JOHNSTON).

When the Spaniards arrived in Peru, they found the Coca held in high estimation, and even considered as divine, so that no one entered the enclosure in which the shrub grew without kneeling in reverence. Still, at that period, it was only used by the Inças and persons of royal blood, with exception of the priests who used it at their sacrifices and when delivering their oracles. Gradually, however, the stimulating and narcotic action of the plant has become so universally liked, as well as indispensable, that now, in certain tracts of country, the Indians are wholly addicted to its use, and notwithstanding the various efforts on the part of the government and the church, will not forego the gratification. It is very evident that the use of such a narcotic, for a lengthened period, and especially in immoderate quantities, must be followed by some effect upon the health and injury to the constitution; hence it was very natural that those naturalists travelling in Peru would have their attention drawn to the Coca, and would eagerly examine its action, in order to compare it with the other narcotics, such as Opium and Hemp, used for similar purposes.

Von Tschudi and Pöppig have especially undertaken this praiseworthy task, and their writings form a rich and valuable source from which a knowledge of the Coca symptoms may be obtained, although they do not by any means agree in their views of the value of this remedy. Von Tschudi, in his well known travels, makes the following remarks:

"All who chew the Coca have an extremely disagreeable perspiration, an offensive breath, pale lips and gums, blunt teeth, and a disgusting, blackish corner of the mouth. The inveterate

Coca chewers, the so-called Coqueros, are recognised at the first glance by their tottering gait, the flaccid, greyish yellow skin, by the hollow, dull eyes, surrounded by bluish brown circles, by their quivering lips, incoherent discourse, and their dull apathetic manner. Their character is mistrustful, irresolute, malicious; they become aged when scarcely entered upon maturity, and should they attain old age, there is imbecility, the inevitable result of their unrestrained propensity. Timidity causes them to flee the society of their fellow men, and seek concealment in gloomy woods, or lonely dwellings, where they give themselves up, for days together, to the passionate enjoyment of the leaves. Then their excited imaginations conjure up the most wonderful visions, at one time consisting of incredibly beautiful and delightful forms, at another, however, of the most horrid figures. They crouch in a corner, with eyes staring, and fixed on the ground,—the automaton-like movement of the hand as it places the Coca in the mouth, followed by the mechanical mastication, alone indicate that, at least, there still exists a trace of consciousness. Sometimes a hollow groan is forced from the breast, probably when the morbidly excited imagination conjures up its scenes of horror, which can be as little scared away as the pleasant dreams at other times. I have never yet been able to ascertain correctly the conditions the Coquero passes through on returning to his ordinary state; it however appears, that it is not so much a want of sleep, or the absence of food, as the want of Coca that puts an end to the lengthened debauch. During the three days in which the Coquero remained in solitude he consumed nearly three-fourths of a pound of leaves. The Indian labourer, likewise, chews his Coca three or four times a day. With this view, he separates the fibres from the leaf, the latter he then chews until it forms a solid ball, a thin piece of moistened wood is then dipped into a powder of unslacked lime which is thrust into the Coca mass in the mouth; this is repeated a couple of times until the right flavour is obtained. The saliva which is produced in abundance becomes mixed with the green juice of the leaves, and is but partially expectorated, the larger portion being swallowed. When the

ball no longer yields sufficient juice, it is then thrown away to be replaced by another.

"The action of Coca is narcotic; when used in a small dose I consider it may be compared with Stramonium rather than with Opium. I may here mention a circumstance hitherto unobserved, that the Indians, by the continued use of Coca, suffer from intolerance of light, attended with a surprising dilatation of the pupils, this is more remarkable among the Coqueros on returning from their solitary indulgence. I have produced the same symptom by dropping ito the eye the strong decoction of the Coca leaves. In one point the Coca is distinguished from Opium by its failing, even in the largest doses, to induce perfect insensibility, or sleep; on the other hand it resembles the latter in its stimulant effect on the brain, for a lengthened period, even when taken in moderation, as well as in producing an entire prostration of the intellectual powers. It has long since been remarked by the oldest observers that by the regular employment of the Coca the Indians require very little nourishment, and with a double quantity, scarcely need any thing at all in order to execute with ease the most laborious undertakings.

"It does not appear to me probable that the Coca is only a temporary stimulant, nor that after its action has subsided, that the system requires an extra amount of nourishment, for I believe that its moderate employment is not only unprejudicial to, but is even compatible with health. I must here direct attention to the extraordinary longevity, of 120 to 130 years, enjoyed by Indians who have, from childhood, been in the habit daily of chewing the leaves, and have thus in the course of their lifetime consumed the enormous quantity of 2,700 pounds, and have, notwithstanding, been in good health. The usual food of the Indians consists almost exclusively of vegetable substances, especially of roasted maize, and roasted barley pounded into meal, which is then swallowed without any further preparation; The dangerous obstructions, which would result from this diet, are prevented by the well known purgative action of the Coca, and thus the cause of many disorders is avoided. It cannot be denied that the Coca possesses nutritive properties in a high

degree. The incredible fatigues endured by the Peruvian Infantry, on the most meagre diet, with the constant use of Coca,—the toilsome labour of the Indian mountaineer continued under the same circumstances for many years, without weariness and without food, cannot simply be owing to a temporary stimulant, but must result from the nutritive properties of the leaves. A Cholo of Huari was employed by me for five days and as many nights in some very laborious excavations, without taking any food during the whole time, or having more than two hours' sleep each night; every two or three hours he chewed about half an ounce of leaves. After having finished his task he accompanied me on a two day's ride, about twenty-three leagues over the table-land, ran on foot beside my fast stepping mule without fatigue, only resting when he felt he needed Coca. He assured me on leaving, that he would immediately undertake to do the same amount of work, without eating, if I would only give him sufficient Coca. This man was about sixty-two years old, and had never had any illness.

"The Indians maintain that the Coca is the best remedy for the difficulty of breathing arising from a quick ascent of the Cordillera (Veta). *I am fully convinced of the beneficial action of the remedy, having very frequently proved it upon myself.* When hunting in the Puna, at the height of 14,000 feet, I was always in the habit of drinking a strong infusion of the Coca leaves, and could then, with the greatest ease, climb on the rocks, for days together, and follow at a rapid pace the wounded game, without feeling greater difficulty of breathing than I should do by running quickly on the coast. After drinking a strong infusion, I have never experienced, as some travellers have done, any cerebral excitement, and general uneasiness; the reason of this may be that I only used the infusion in the cold Puna, where the nervous system is very much less excitable than in the luxurious and debilitating climate of the forests. In fact, I always felt a great satiety after taking the Coca infusion, and though without any additional breakfast, I needed no more food until after the usual time.

"It cannot be denied that the use of the Coca on European vessels, especially when on long voyages of discovery, would

prove of extraordinary utility. The sufferings of sailors, in times of danger, would be entirely taken away by the use of Coca, the watching during a stormy night might be made more endurable, and the weariness would be much less than that caused by the frequent doses of brandy usually given under such circumstances.

"What a great consolation would a store of leaves be a-board a vessel when provisions failed; for weeks the crew could be supported on very scanty rations, when supplied with double quantities of Coca. At least, in the colder regions, and in the hands of a prudent captain there would certainly be no need to dread the injurious effects of the Coca, and its utility would be clearly demonstrated.

"After several years' careful observation of the action of Coca, my opinion is, that its moderate use is unattended with any prejudicial consequences to the health, that without it the Peruvian Indian would not enjoy such constant health on his spare and indigestible diet, nor be capable of going through such constant and hard work as is now the case; I consider this shrub as of very great benefit to that country, as one of the most important means of preserving the nationality of the Indians, and of preventing their total annihilation. Coca eating is no more a vice than wine drinking, it is only the excess in either instance which stamps it as such." (*V. Tschudi,* Peru, 2 vol., p. 299).

Pöppig speaks of it as follows:

"The stimulating principle of Coca is of a highly fugitive nature and seems to reside in the leaf, and a large quantity is required to be taken by the Coquero or the experimenter, in order to produce the stimulating effect. Whether the chemistry of our days will ever be able to produce it in an uncombined state is a matter of much doubt, for the leaves are considered useless after being kept a twelvemonth. Large heaps of newly dried leaves give out a very powerful odour which excites headache in any one sleeping near. I made experiments with the infusion (grass green) which was of an insipid, grassy taste, but possessed the expected stimulating principle. When taken in the evening it caused great uneasiness, discomfort, and

lessness, but in the morning its action proved much milder, causing loss of appetite. Dr. Archibald Smith once used an infusion of Coca instead of tea, but felt in such a state of nervous excitement that he did not repeat the experiment a second time. The excessive use of Coca always affects the health; its abuse may be for some time unattended with any ill effects, but the more frequently the orgies are repeated, the moister and warmer the climate may be, so much the more speedy will the noxious action be developed.

"Debility of the digestive organs is the first symptom which attacks the Coquero; at first it seems to be slight uneasiness, and may then be confounded with indigestion, but it soon reaches a frightful intensity. Bilious affections now make their appearance, with their numerous tormenting sufferings common under a tropical sky; of these constipation is of so frequent occurrence, that from its prominent character in the disease, the latter has been called Opilacion. When jaundice occurs, indications gradually follow which show more clearly the shattered condition of the nervous system, the patient complains of headache and other such like sufferings, gets weaker, can scarcely take any food, and quickly becomes emaciated. This state is often succeeded by a kind of anæmia, the bilious tint gives way to a leaden colour, which is, however, only apparent in whites. An insufferable sleeplessness sets in, from which, in fact, those suffer who do not take Coca in excess.

"The appetite is extremely irregular, for the aversion to all food is often suddenly followed by an insatiable craving, especially for animal food which is entirely out of the reach of the poor foresters. Partial œdematous swellings arise, and subsequently terminate in ascites, while the aching of the limbs is for a short time relieved by the appearance of furunculi. The disposition of the patient is very changeable, he is mostly very wayward, but notwithstanding his sad condition, he yields, on the first opportunity, to an unbridled passion for brandy. The Coquero may drag on his miserable existence for some years, until he finally dies of general consumption. The effects of excesses upon the mind is not less. The passion for soli- ust be injurious to the Coqueros, and if the intellectual

powers seem to suffer less from the use of Coca than from the use of brandy, still the moral consequences of both kinds of excess may resemble each other in more than one point. Coca is often spoken of in Peru as a gift from heaven, as a wonderful shrub to which the most singular powers are ascribed, but a great error has been fallen into as to its mode of action, for the opinion that such a shrub owes its activity to a stimulation of the nerves, is the common idea of the public, which is never disposed, in any thing, to a profound examination. Surprising instances of endurance by the use of Coca have, in fact, been adduced, still far short of the fables told of it. The miner, as Barretero, will for twelve hours long do the fearfully hard work of an excavator, and sometimes double that period either from self interest or from necessity. Beyond a handful of roasted maize he will take no food, but must make a pause every three hours to eat Coca. Unless the latter has brought on any disease, he requires, on returning from his work just as much nourishment as any other, and takes it in astonishing quantities. The same remarks apply to the Indians who cross the Andes as carriers or porters, as well as to the patriots in the revolution who performed wonders by the abundant use of Coca. But notwithstanding all this, the latter is only a stimulant, which readily becomes a dangerous one, and which permits no escape to its victim. At least, I cannot at all suppose that in that thin, membranous, nearly inodorous, and tasteless leaf, there can be present, in any quantity, any of those substances which are held to be nutritious, in the ordinary meaning of the word. I have resided, for a month, in a Coca plantation, and have paid great attention to the shrub; although unprovided with any chemical re-agents, still I have made a number of experiments, and have never been able to obtain vegetable mucus in any material quantity." (*Pöppig*, Travels in Chili and Peru).

Johnston, likewise, thinks it inexplicable that the simple mastication of an ounce or two of Coca leaves, when the juice is partially, and the solid material is wholly ejected from the mouth, should sustain corporeal power, or nourish the body in the real meaning of the word. Much might be adduced to

prove its impossibility: its action must, then, simply be that it prevents or diminishes the usual and natural change of tissues which accompanies every bodily effort, and thus stays the molecular change, similarly as wine or tea acts on the nervous system in old people.

Professor Schlechtendal (the latest author on Coca), expresses himself positively, that it is to be considered as a powerful tonic to the digestive organs, as possessing sedative and nutritive properties, and as such to be useful in weakness of the stomach with its consequent constipation, colics, and hypochondriacal disorders. He strongly recommends its employment in Europe.

Besides Tschudi, almost all other naturalists and travellers affirm that the Coca is universally used in the mountains as the best preventative of, as well as almost exclusive remedy for the *veta*, in which disease, in fact, it possesses surprising healing powers. Hence, for this reason, it seems to us of importance that we should examine more minutely into the nature and the symptoms of this highland malady. We shall find much interest in doing so, as it will prove and demonstrate the truth and constancy of the law of similarity, for the direct proving of the Coca on healthy individuals will produce symptoms similar to those of the malady against which it has been held as a prophylactic, and for which it has universally been considered a specific. We will now add a short account of the most certain and most accurate observations of the veta.

According to Tschudi, the veta (puna, sorracho, mareo), is the consequence of diminished atmospheric pressure usually occurring at considerable heights. The first symptoms generally appear at the altitude of 12,600 feet, consisting of vertigo, humming in the ears, indistinct vision, soon followed by headache and nausea. Even when on horseback these symptoms are of frequent occurrence, but with increased intensity on ascending a hill. The greater the ascent, the more severe do the symptoms become. In addition there is a feeling of weariness which finally amounts to an impossibility of advancing, owing to impeded respiration and violent palpitation of the heart, for, according to the experiments

of Weber, the head of the thigh bone is retained in the acetabulum by the pressure of the air, hence, when the pressure of the latter is diminished, it requires a greater muscular effort to retain the thigh bone in position. Perfect rest, indeed, relieves the symptoms for a few moments, which, however, return with renewed severity on continued movement, and are accompanied with fainting and violent sickness. The mucous membranes of the respiratory organs and intestinal canal become affected in like manner, hæmoptysis and dysentery being the usual concomitants of the severe form of the veta. The sensations attendant upon this malady may, in some measure, be compared with those of sea-sickness, only in the latter, the very distressing dyspnœa is absent. Sometimes the severity of the disease is so great that the traveller loses his life in consequence of the hæmorrhage from the lungs and intestinal canal. Very much, however, depends upon individual temperament and usage; the inhabitants of the coast and Europeans, when they pass over the Cordilleras for the first time, suffer from the disease, the latter proves more severe in weakly, nervous, fat, or plethoric persons, as well as those suffering from disease of the heart and lungs.

The system readily becomes accustomed to the rarified atmosphere by a longer residence in these regions. There are some districts well known for the severe form of the veta, and there are others which lie much lower, in which the disorder is of a much milder character: thus it appears that it is not only the diminished atmospheric pressure, but that there are other causes in the climate which occasions it. These districts are generally very rich in metals.

The mountaineers, who have from childhood lived in this rarified atmosphere, never suffer from the veta; they have likewise a prophylactic (the Coca) which also proves of great service to the dwellers on the coast. The author describes an attack of the veta, from which he himself suffered, in the following terms.—"After having passed the whole of the morning and forenoon in ascending the mountain at an easy pace, I dismounted in order to lighten the burden of the mule. I started vigorously again, but soon began to feel the effects of the diminished atmospheric pressure, and at each step I expe-

rienced a degree of discomfort which I had never felt before. I was obliged to stand still and draw breath, but scarcely could do so; I endeavoured to advance, but I was overpowered by an indescribable anxiety; the throbbing of my heart against my ribs was audible; my breathing became short and interrupted, and I felt as if I had a world on my chest; my lips became blue, swollen and chapped; the distended capillaries of the eyelids gave way, and drops of blood spirted out. The senses, in a like degree, became enfeebled, I could neither see, hear, nor feel any more; a dark cloud appeared before my eyes, which were deeply reddened, until bloody tears gushed out. My head became giddy, my senses vanished, and trembling I laid myself on the earth. It was physically and morally impossible for me to drag myself any further. Half unconscious, I lay a long time on the earth, until I had so far recovered as to be able, with difficulty, to mount my mule again, and proceed onward.

"The veta likewise affects the horses unaccustomed to the mountains. They begin to walk slowly, often stand still, they tremble all over, and fall down. The higher they ascend, the more violent does the trembling become, and the more often do they fall. If the saddle is not taken off, and rest allowed, as well as the animal succoured in every possible way, it dies. When a horse is attacked in this way, the Arrieros bleed him in four places—at the end of the tail, in the mouth, and both ears. The ears and tail are often half cut off, and the nostrils slit up several inches. This last remedy appears to me to be alone of utility, as the animal is enabled to draw in a larger quantity of air through the enlarged nostrils. As a preservative, bruised garlic is put up the nostrils. Mules and asses are much less subject to the veta, probably because they ascend with more ease. Animals bred in the Sierra are entirely free from the disorder. Some of the domestic animals are very subject to it, especially cats. At the altitude of 13,000 feet the latter cannot live. Innumerable attempts have been made to keep them in the villages of the higher mountainous districts, but all have terminated unfortunately, for the animals have died in a few days from the most frightful convulsions, similar

to the most violent chorea. It is distressing to see a poor animal attacked with dreadful convulsions of the whole form, suddenly spring up, climb up the wall, fall backward, lie for a long time immoveable, then repeat the same scene, until it dies. Cats, when thus attacked, never attempt to bite, nor do they attempt to avoid man. I have seen, in Yauli, on two occasions, cats thus attacked. Pure bred greyhounds are also liable to the disorder, but sink less rapidly, and may, with great care, be kept alive a twelvemonth." (*V. Tschudi*, Peru, 2 vol.)

"Scarcely does the stranger take his first step (in the Cerro de Pasco), than he feels an unaccountable weariness, and on ascending the steep streets he has in addition a painful shortness of breathing, slight headache, and even a rush of blood to the chest. At the same time appears a perfect loss of energy, stupidity, a peevish temper, and hypochondriacal despondency. The difficulty of breathing obliges him to take rest every ten steps, and he in vain endeavours by full inspirations and the utmost enlargement of the chest, to fill the lungs with air. It seems as if he were in a vacuum, and the feeling of anguish increases with the failure of every effort to strive against his feebleness. The torment only diminishes with perfect rest. In those instances in which the disorder is more highly developed, fainting fits very often occur, symptoms of a flow of blood to the head and lungs causes an indescribable feeling of illness, and without fever, and even with the feeling of internal cold, together with numbness of hands and feet; the pulse varies from 108 to 120. The constant weariness and inclination to sleep are far from inducing refreshing sleep, for rest is not anywhere attainable. The nocturnal hours cause the greatest oppression of breathing, and are the period of a very martyrdom; when incapable any longer of the recumbent posture, he seeks alleviation from the glimmering fire. The eyes become very sensitive, so that reading cannot be indulged in long; some are troubled with slight headaches, while others suffer from nausea, and various disorders of the digestive apparatus, which may be compared with sea sickness. When this distressing condition is about to terminate, then sometimes arise critical symptoms attended with great inconvenience.

After six or seven days of great suffering, a recovery mostly takes place, with sound lungs and a good constitution; but weeks may pass away before every symptom subsides. Either a kind of nettle rash breaks out in several parts of the body, or it is limited to the lips, and occasions scabs, bleeding and insupportable pain. In persons with especially thin skin and fair complexion, hæmorrhage will take place from the surface of the body. It is only those with lung and heart diseases who run any danger from palpitation and hæmoptysis. The most appropriate remedies are iced lemonade, and strict abstinence from spirituous liquors. It is very rarely that anyone is attacked a second time, but weariness and difficulty of breathing may remain behind for a long time. The Indian seems to enjoy a kind of immunity from the veta, for he is able to go through a fearful amount of work in the mines, with the same endurance on the heights as in the plains." (Pöppig, 2nd vol.)

The experiments of other inquirers, who have in other countries attained considerable altitude on mountains or in balloons, accord with the observations of Tschudi and Pöppig; for this reason it may be concluded, without any doubt, that it is really the diminished atmospheric pressure, and not a local climacteric or telluric influence of the Cordilleras, which is the cause of the veta. The symptoms of this disorder are clearly so characteristic, and at the same time have so much analogy with those of diseases of frequent occurrence with us (emphysema of the lungs, and heart disease), that we are greatly disposed to think that so important a prophylactic against the disorder, as well as specific remedy, must prove of great utility in similar maladies.

DIRECT PROVINGS OF THE COCA ON HEALTHY PERSONS.

These provings were made between 1853 and 1856, on seven persons, six of whom were in the medical profession, and a girl of nine years of age. None of the provers, excepting Dr. Reichenbach and myself, were cognizant of the remedy being proved; neither could any of the parties ascertain beforehand e results of the proving in any of the others. The leaves, ure, and some dilutions of the latter were employed. The is of a dark brown colour, and its taste not by any

means disagreeable, but rather aromatic. With respect to the diet, it may be readily understood that no particular changes were made, nor preventive measures taken, but the provers were simply enjoined to avoid bodily exertion, as well as mental excitement.

First Proving.

Dr. Rauch, 45 years of age, formerly a preacher, at that time student of medicine, (now a physician in America) is tall, thin, but of powerful frame, and always enjoyed good and sound health. He took the 1st and 2nd decimal dilution of the Coca tincture. The following remarks were noted down by him.

October 31st, 1855. Early in the morning, at 7 o'clock, I took 3 drops of medicine number 2. In 20 minutes I felt and heard a grumbling, which extended through the pleura, and then passed through the ascending and descending colon.

At ¾-past 7 o'clock was troubled with flatulency, and had an urgency to stool, the latter usually taking place at half-past 8 or 9 o'clock.

8 o'clock. Was compelled to yield to the urgency for stool; the evacuation was much more liquid than usual, followed by a continued want of a further evacuation, which lasted 3 minutes.

At ½-past 8 coffee was taken, followed by eructations.

At a ¼ to 9 o'clock the medicine appeared to enter into the circulation. Passing stitches in the left lung, between the 3rd and 6th ribs were felt, increased by deep inspiration.

At ½-past 9 o'clock. *Constriction of the chest*, rumbling in the abdomen as if from flatulency, with eructation as in gastritis, but without taste or odour. Feeling of fulness in the regio epigastrica and mesogastrica. On the other hand, the shootings and constriction of the chest cease.

Noon. All the symptoms disappeared after dinner; but the pulse was weak, quicker, and rather low, remaining so until night.

On November the 2nd, early in the morning, at 7 o'clock, I took 5 drops of the medicine number 1, to convince myself that the proving could be depended upon.

In 5 minutes the grumbling in the abdomen came on, followed by discharge of flatulen[illegible]

At ½-past 8 o'clock, half an hour after taking coffee, a soft stool was passed, of a normal colour.

11 o'clock. The grumbling in the abdomen continues as well as frequent discharge of flatulency.

3 o'clock in the afternoon. Slight eructation after dinner. The grumbling and rumbling still continue. Since 9 o'clock in the forenoon the pulse was weak, quickened, and small. A want of food was felt much earlier than usual, although the epigastric region was distended as if from an overloaded stomach.

On the 4th of November, at 7 o'clock in the morning, I took 5 drops of medicine No. 2.

At a quarter past 7 o'clock, frequent sneezing. An urging to stool before the usual hour. The other symptoms did not appear. The medicines were discontinued for three days.

On the 7th of November, at 6 o'clock in the morning, I took 10 drops of No. 2.

At half-past 6 o'clock, grumbling and rumbling in the abdomen. Other symptoms were absent.

On November 8th, at 6 o'clock in the morning, I took 15 drops of No. 2. Rumbling in abdomen as before. Slight giddiness was caused by going out into the open air; objects seemed to turn before the eye. This however disappeared in an hour.

On November 9th, at 2 o'clock in the afternoon, without any cause, I felt a great tickling and necessity to cough, both in the trachea and larynx. This symptom lasted for an hour. In the evening in bed had a dry cough as in catarrh of the air passages.

On the 10th of November, cough in the morning with expectoration of an adhesive, thick and yellow whitish colour, as in chronic catarrh; dryness of the throat and mouth, with thirst. Sensation of weariness and sleepiness.

A quarter after 3 o'clock, the inclination to cough began afresh in the larynx whilst seated quietly in the room; after having coughed from 20 to 25 times, without expectoration, it gradually ceased again.

November 11th, at 6 o'clock in the morning, I felt slight pains. They became more severe towards 9, and re-

mained the same until 11 o'clock. The sensation seemed to be in the small intestines, of a cutting, drawing and gnawing character, though without rumbling. Quick walking produced alleviation.

One o'clock. The stomachache subsided after taking soup with bread and caraway seeds, but returned in half an hour. It was seated exclusively in the jejunum and ileum. The pain subsided, though only for some minutes, by repeated pressure in the regio mesogastrica.

Two o'clock. The griping is less, grumbling as if from flatulency. Pulse 76, rather low.

Half-past 2. The cutting, drawing pain has again returned and is more violent than before. Constant urgency for discharge of flatulency without doing so. The abdomen is swollen, tympanitic, distended. The drawing and grumbling more violent.

Four o'clock. Very frequent discharge of flatulency, odourless, diminished during the griping and rumbling. The abdomen is much less distended.

Five o'clock in the evening. The gripings have increased after a cup of chocolate. Urgency to stool, the evacuation is small in quantity, rather hard, with the feeling as if the sphincter were paralysed. Increase of gripings. Colicky pains. Weakness and sleepiness, with frequent yawning and paleness of the countenance.

Nine o'clock in the evening. I could no longer remain out of bed.

November 12th. In the morning had a return of the gripings, which became more severe after taking coffee, lasting until 5 o'clock in the evening, when they subsided after drinking cold beer.

November 13th. All the symp[illegible] have disappeared.

Second P[illegible]

Dr. Reichenba[illegible] rather delicate he[illegible] is feverishly excite[illegible] gains his equanimity [illegible] *kept*, contains the follo[illegible]

The 1st of July, 1855, at 6 o'clock in the morning, I took 10 drops of Coca, 2nd decimal dilution.

At 8 o'clock, giddiness on ascending quickly a steep spiral staircase, which was not usually the case, although I had been in the habit of frequently ascending the stairs, followed by relaxation of the bowels.

The 2nd. Having been up the whole night, I took 10 drops of the same dilution, but without any result.

The 3rd. I took 25 drops without any effect.

The 4th. At 7 o'clock in the morning I took 25 drops of the 1st decimal dilution.

At half-past 8 o'clock, giddiness for half-an-hour, removed by rest and a glass of wine.

In the evening felt sleepy very early, but could not sleep; became more wakeful in bed and felt heat with throbbing of the temporal arteries until midnight.

The 5th. As in the previous night I had gone to sleep very late, and had even then been disturbed by a patient, I did not take any more.

Very irritable, chilly. In the evening weak and tired.

The 6th. At 6 o'clock took 10 drops of the strong tincture. Eructation of mucus.

At 8 o'clock a feeling in the head of great exhaustion; flashes before the eyes, like distant lightning.

The 7th. After being occupied until 3 o'clock in the morning writing letters, and having taken coffee, I took 10 drops.

Taste in the mouth like musk. I felt extraordinarily well, lively and ready for work, until noon (curative symptom).

In the evening the same flashes as yesterday.

The 8th. Was called to an accouchment; on returning, I took at 4 o'clock in the morning 25 drops of the tincture.

At a quarter past 4, felt much exhausted and sleepy.

At half-past 5 o'clock, extraordinary sleepiness; could scarce [illegible] my eyes open, even to write a couple of words.

[illegible] caused some improvement in an hour and a half's [illegible]riness, being unable without great

[illegible]e. (During the day I purposely

I went early to bed, but was troubled with sleeplessness and burdened with thoughts; shivering.

I rose again at 11, and worked till after 2 in the morning, perfectly awake, only now and then with a little aching of the eyes; then quiet sleep.

The 9th I did without coffee. Very great weariness. Eyes painful. White specks before the eyes, so that the book which I was reading appeared as if marbled. Little appetite; mucous taste.

I was quite overcome with sleep during dinner, lasting for an hour. On awaking the phantasms had disappeared, but on attempting to read, felt a drawing in the occiput extending to the temples. This condition lasted during the night.

In the evening, deep and fast sleep, until 7 o'clock in the morning.

The 10th. Giddiness and dizziness, an involuntary quick stepping when walking, the head inclined forward, with fear of falling. Temporarily relieved by taking broth.

Little appetite at noon, especially so for flesh, which I usually prefer.

Fever and great weakness, relieved by wine; the improvement continuing until evening. Weariness in the evening, with sleeplessness when in bed.

At 11 o'clock at night I again took 10 drops of the tincture. Temporary sleepiness, followed by great wakefulness until 4 o'clock, succeeded by comfortable sleep until 7 o'clock.

The 11th. I again felt lively and strong the whole day, and took in the evening 10 drops.

Sleeplessness but with inclination to labour through the whole night.

The 12th. Very weak during the day. In the evening excited and cheerful (my wife had returned from a journey). Sleep as usual, sound.

The 13th. I took nothing and did not feel any particular action.

The 14th. Took early 25 drops. Metallic taste in the mouth. Butter, though it was good, tasted in the morning like herrings.

The 17th July. Dulness and confusion of the head. The water tastes as [illegible]

The 23rd. Took 65 drops before dinner. Giddiness, whirling in the head.

On going out after dinner, white specks of bright serpentine lines before the eyes, with great weariness for an hour. Then a pressive headache on the right side and in the occiput, also, but less painful, in the right side of forehead; with giddiness and chilliness. These symptoms disappeared towards evening. Then dyspepsia with tasteless eructations, nausea, and great weariness.

After having heen in bed half-an-hour (from 10 to half-past 10), I once more became wakeful and lively, had however shivering, with giddiness and fever, crowding of thoughts, and solicitude. Sleeplessness until 2 o'clock, terminating in sweating, rest and sleep. Awoke early.

The 24th. A liquid stool. Dyspepsia. In the afternoon faintness, pain in the occiput, sleeplessness in the evening.

The 25th. Diarrhœa and loss of appetite. The afternoon the same as yesterday, but with shivering and mild fever. In the evening good sleep.

The 26th. Loss of appetite with great satiety. Tongue coated, a nauseous taste with a little fever. Occipital headache in the afternoon with fever. Sleepiness in the evening.

The 27th. Diarrhœa twice, without any further symptoms. Weakness the whole day. Better in the evening, with sleeplessness.

The 11th October, 1855. Took 25 drops of a fresh tincture from H. Gruner in Dresden. Pressing pain in the right cheek bone.

The 12th. Took 50 drops. Giddiness, pressure in the occiput.

Headache in the afternoon (like catarrhal) with cold feet and constant urging to stool.

The 13th. More headache with shivering.

The 14th. Took 60 drops early in the morning. Weariness in the afternoon, with giddiness and headache, especially in the forehead and occiput, with shivering.

The 15th. Slight headache after dinner, with little shivering.

16th. Unusual urging to stool, but no diarrhœa, so I feel quite well, being particularly free from any un- n the head.

Third Proving.

Dr. Kallenbach, 27 years of age, of tolerably good constitution, rather scrofulous as a child, for some years rather inclined to nasal and bronchial catarrh. Having taken, on several occasions, at intervals of some days, small doses of from 5 to 10 drops of the tincture, he observed nothing more than humming in the ears.

On the 16th May, 1856, at noon, took 50 drops of the tincture, a feeling of deafness in both ears, although I still heard everything as clearly as before. It seemed to me as if something had happened in the ear, which would necessarily cause deafness.

Singing in the left ear for many minutes together, audible pulsations in both ears. In the evening, singing again in the left ear.

The 17th May. Continued feeling of deafness. On reading aloud, the feeling as if the tympanum were pressed outward by the tone, or as if the tone only reached the ear through a thick medium. Pulsation and dull humming in both ears (forenoon).

Towards 7 o'clock in the evening all the symptoms had disappeared by empty deglutition, cracking in both ears.

The 18th May. Nothing.

The 19th.. A slight pressive pain in the fore part of the head the whole day. On coughing, or straining at stool, a violent pain was felt deeply on the left side of the forehead, like a pressing outwards.

While smoking in the day, a frequent tickling in the larynx, inducing a short, dry cough.

Fourth Proving.

Dr. Schubiger of Uznach, 23 years of age, healthy and robust, took on three following mornings 5 drops of the tincture without observing any changes at all. Only on the evening of the 3rd day he felt a burning and pressing in the left renal region, increased by motion, with frequent [illegible] urinate, as well as burning during th[illegible] for 6 days, and on the 3rd and [illegible] albuminous, nor w[illegible] *perceptible.* Accord[illegible]

toms resulted from a cold, taken on the water, he having at the same time drunk some bad beer: this was very likely the case, for none of the other persons had similar symptoms after taking Coca. Hence they have not been included in the list of symptoms.

Fifth Proving.

In the years 1853, 1855 and 1856, I proved the Coca on myself. Now, at the end of 1856, I am 38 years old, of middle size, tolerably robust, and in very good health, able to make any exertion as well as able to resist any noxious influences, although I am troubled with emphysema of the lungs. The latter has been found out by a physical examination of the chest, for it has not caused much inconvenience. Although I am a very quick walker, and can go a great distance, and can ascend steep stairs and hills much better than I could in early youth, yet I have a certain degree of difficulty of breathing, palpitation, and occasionally a slight feeling of oppression of the chest, without any assignable cause. I have no disposition to coryza and catarrh, can lie and sleep on either side. I am subject to temporary constipation without, however, feeling any inconvenience therefrom. In experimenting with other medicines, I have shewn but very little sensibility to the action of medicines.

The 28th October. In the evening I masticated half a leaf.

The 29th October. In the forenoon, much oppression on the chest, dyspnœa, especially on going up an ascent; at dinner, no feeling of hunger as at other times, although I took a good deal and with appetite; in the afternoon, an unusual sensation of fulness in the stomach, abdomen, and chest, no inclination and ability for work; stool normal.

The 30th October. Early in the morning took 2 drops of the tincture. In the forenoon, unusual oppression and shortness of breathing, especially at any ascent; at noon, little hunger, though I took much to eat.

The 1st of Nov. Took 3 drops early in the morning, as

the afternoon, felt twice an irritation in

less shortness of breathing.

thing was taken. Felt no oppres-

sion at all, even when walking quickly, or up an ascent, had no dyspnœa. Felt very hungry at 11 o'clock in the forenoon, and ate with much appetite at dinner, although less than on the preceding days when I did not feel hungry.

The 30th June, 1855. Took 5 drops of the tincture at 8 o'clock in the morning. Had much eructation an hour after, occurring every quarter of an hour, without taste, and without any fulness or unpleasantness of the stomach; on the contrary, I felt my chest very easy, as well as active and strong, with great inclination to walk quickly and to a distance, although it was very warm and the sun powerful. The eructation lasted a couple of hours. There was, in addition, unusual and frequent yawning, with sleepiness when sitting. A great appetite at 11 o'clock; at 12 o'clock, had a singular feeling of emptiness of the stomach and abdomen, and on walking a painful contractive sensation in the stomach, and near it on the left a pain similar to what is called stitches in the spleen. Ate a great deal at dinner without any subsequent fulness. At 2 o'clock in the afternoon, a normal stool; great sleepiness towards 5 o'clock, for an hour; great appetite in the evening, and took an unusual amount of food; early in the morning, after a very comfortable sleep, had a feeling of dryness in the throat, which was uncomfortable on swallowing, disappearing in ten minutes.

The 1st of July, at 8 o'clock, I took 10 drops of the tincture. Towards 9 o'clock again felt the same sensation in the throat, with swollen uvula, which felt as if scraped, frequently rendering it necessary to hawk and expectorate mucus, for 2 hours time. After 10 o'clock, had a peculiar rumbling in the abdomen, with sensation of emptiness, hunger, and stitches in the spleen; weight on the chest when walking and ascending the stairs, often obliging me to inspire deeply, neither painful nor disagreeable; a great appetite at dinner, and ate much. At 5 o'clock in the evening, a distinct feeling of swelling of the uvula, with difficulty of swallow[illegible] the uvula with [illegible] ticular redness; on [illegible] spleen, this time a p[illegible] ribs of the left side, i[illegible] ten minutes; a sensati[illegible] *evening.*

The 2nd of July. Took nothing. Slept very soundly and had pleasant dreams; painful deglutition on awaking, with great swelling of the uvula; on first walking had again the same pain under the left ribs for five minutes; felt sleepy at 9 o'clock in the morning; heaviness of the head, slight headache from 11 o'clock, similar to what I have been accustomed to, which principally shews itself in a painful disinclination to every motion or shaking of the head, and in a painful throbbing in the brain like the pulse, on moving or stooping. Although there did not seem to be any other cause for it, yet I cannot venture to ascribe it to the action of the medicine, as it was precisely similar to the headache from which I occasionally suffer; however, it lasted from dinner time till evening. Throughout the day I had a painful paralysis in the fourth and fifth fingers of the right hand, such as I had never felt before, especially on stretching them out and grasping anything, without external soreness. The difficulty of swallowing, though less, likewise continued throughout the day.

The 3rd of July. Took no medicine. During the day, the swelling of the uvula, as well as the difficult deglutition, almost entirely disappeared, but the peculiar pain of the fingers remained, but both it and the paralysis were more in the abductor digiti minimi, &c.; on firmer pressure, there was a soreness deep in the flesh, like that from a blow, or after making use of any extra exertion; otherwise, there were no other symptoms.

The 4th. Again took nothing. Throughout the day slight difficulty of swallowing; on the other hand, the feeling in the hand had entirely disappeared; slight oppression of the chest, while sitting, in the afternoon.

The 5th of July. Still without medicine. There was no further symptom.

The 6th of July. Early in the morning I took 30 drops of [illegible]; ten minutes after taking the medicine slight eruc- [illegible] took place, followed soon after by approaching giddiness [illegible] the sensation as if the body were drawn [illegible] lasting for some minutes. In half an [illegible] and oppression on ascending [illegible] thing further was noticed. At

7 o'clock in the evening, whilst walking slowly, felt a peculiar weight in the chest with dyspnœa, at the same time in a small place on the right side, close to the uvula, there was decided pain on swallowing, as if from a sore, with swelling. A little later, while sitting still, there was an aching weight on the chest, with a constant necessity to inspire very deeply; sensation of extension of the lungs, extraordinary weariness after a moderate walk, very good appetite. Dyspnœa even when in bed, palpitation of the heart, with weariness, though not unpleasant, of the whole body as after any great exertion. Slept sound and well.

The 7th July. Took in the morning, at 8 o'clock, 40 drops of the tincture. On awaking early, the same pain in the throat, dyspnœa and distension of the stomach; ten minutes after taking the medicine, very frequent yawning, without weariness, on walking, frequently recurring in the course of the forenoon; vertigo for a short time, on sitting down fifteen minutes after, recurring later when rising up from the seat; constant dyspnœa during the whole of the forenoon when walking moderately quick and ascending a few stairs; a pressure on the whole of the chest, with constant inclination to inspire deeply, as if something could be thereby expired. Momentary darkness before the eyes, on ascending some stairs, as I have sometimes experienced on passing on a hot summer's day, from the bright sunshine into a dark hall or room; a very good appetite at noon, and took plenty to eat; in the usual afternoon's nap had a sudden jerking and awoke, (I have occasionally, for years, had this symptom), the pain in the velum palati became much less during the day. Towards 4 o'clock in the afternoon had black specks flying before the eyes; had two normal evacuations, afternoon and evening, whilst I have never been in the habit of having more than one stool in the day; slept fast and sound in the night.

The 8th of July. No further medicine. Scarcely any dyspnœa on walking in the forenoon, there was still a little on going up stairs; there was, however, great weakness and weariness, especially for the first two hours; no uneasiness in the afternoon.

The 9th of July. No further medicine. No more dyspnœa, *nor any other* symptoms.

The 10th, at 8 o'clock, I took 60 drops of the tincture. Towards 9 o'clock had yawning without any sleepiness, on the contrary, notwithstanding the great heat, I felt quite fresh and vigorous, without any dyspnœa; between 11 and 12, being in a cool room, felt very sleepy and my head ached, both however disappeared on again going out into the open air; no further symptom in the afternoon.

The 11th. Took no more medicine. On awaking had pain in the muscles of the forearm, on the edge of the radius, on moving it or on pressure, as if from a violent blow; the pain lasted throughout the day and was very violent, just as if the place were red and blue, still there was nothing to be seen.

The 12th. No medicine. There was still pain on pressure, though it was less than the previous day; pain was no longer caused by motion; an unpleasant taste in the mouth on waking in the morning, without the usual appetite, eructation and fulness in the stomach, with continued urgency to eructate, for three hours; ate at noon with appetite, soon followed by the distension of the stomach, constant belching, with urgency to eructate, lasting till evening. Although I had, on this and the preceding day, taken what might not be strictly termed as easy of digestion (such as strawberries and cream) still they were things which I had been accustomed to eat without any inconvenience.

The 13th of July. No medicine taken. There came a jerking, tearing pain in the great toe of the right foot, which I had felt some eight months before, and which lasted during the night and two following days.

The 25th of Sept., 1856. Masticated two leaves in the morning. On walking in the forenoon had weight on the chest with dyspnœa, occasionally a painful pressure of the chest, though affecting the breathing much less.

The 26th. No medicines. Towards 11 o'clock in the forenoon had several times a swollen feeling of the velum pendulum palati, rendering swallowing difficult; once attended with tickling inducing cough.

The 27th. No medicine. Towards noon had a pain in the rather severe when swallowing, with a sensation of

swelling, which became very severe in the evening, and was accompanied with decided elongation and reddening of the uvula and its vicinity. On the following day, although the pain was much less, it was still there, and gradually ceased in the course of the day.

The 16th of October. Took early 10 drops of the tincture. A quarter of an hour afterwards had loud eructations without taste, and without uneasiness in the stomach; surprising inactivity the whole forenoon, heavy, even sleepy, with frequent yawning.

The 17th. Lachrymation of the right eye on awaking, slight reddening of the conjunctiva and the lids at the inner angle; in the course of the forenoon, surprisingly fresh, lively and inclined to walk; a slight mucous discharge from the right eye, sometimes likewise in the left eye the whole day.

Sixth Proving.

R. H., 26 years of age, is in good health, with the exception of a sudden and slight attack of Rheumatism, and of a dry papular eruption on the back of the hand, which he has had for some years. Whilst a child he had almost all the usual ailments, such as mumps, measles, scarlet fever. In his 13th year he had a severe nervous fever, diaphragmitis in his 17th, and inflammation of the lungs in his [illegible] He also had gonorrhœa in the same year, which [illegible] From that time he has been quite healthy. [illegible] the results of his proving.

The 1st of October [illegible] Al[illegible] morning I masticated four [illegible] Two minutes after I had [illegible] appear to swim toge[illegible] writing with two pens [illegible] feeling gradually arose [illegible] eyes; great tingling in my [illegible]

Eight o'clock in the mor[illegible] sensation of dryness in the thro[illegible] I cannot write without double vis[illegible] the letters.

Ten o'clock in the morning. The time of my regularly going to stool passed over without having any desire; the headache is better, still heaviness in the head, and there is still tingling in the ears; uneasy feeling in the chest; great nausea after breakfast.

One o'clock in the afternoon. Food has no flavour; notwithstanding every effort, the bowels have not been relieved.

Six o'clock in the evening. Severe vomiting, twice, of watery mucus, without any bitter or acid taste; after that a strong taste of the leaves masticated in the morning; urine of a dark brown appearance.

Eleven o'clock at night. Awoke up by a great desire to stool; motion firm and abundant.

The 2nd of October. At 7 o'clock in the morning masticated two leaves. Ten minutes after, precisely the same symptoms as yesterday; the uneasy feeling in the chest which was felt yesterday, recurred to day; I believe it depends upon a much stronger action of the heart, at least I feel my heart pulsating more strongly; headache not so violent as yesterday.

Six o'clock in the evening. Have not had any nausea to-day. Cannot perceive any further change.

3rd of October. At 7 o'clock in the morning again masticated two leaves. At 11 in the forenoon had again the same symptoms before the eyes, in the ears and head, as yesterday. The bowels have become very irregular. I am now very much constipated, which occasions me abdominal uneasiness. Again had palpitation for six or ten minutes.

Six o'clock in the evening. I felt no further change; abdomen distended; no action of the bowels.

[illegible]th of October. At a quarter to 7 o'clock masticated one [illegible] At 8 o'clock in the morning, scintillations before the [illegible] much, nor the ringing in the ears; slight head-[illegible]oon, toothache in a hollow tooth. Six o'clock in [illegible]ill tooth[illegible]he, otherwise no change. Bowels [illegible]h, and [illegible] again.

[illegible] the violent toothache masti-[illegible]ock in the evening, bowels

6th October. Refrained from medicine to-day. Toothache went away without taking medicine. Ten o'clock in the evening, bowels regular.

7th October. At a quarter to 7 in the morning, masticated five leaves. At a quarter to 8 I found it impossible to continue reading, the letters ran together; fiery points passed downwards before the eyes; dulness of the head. Nine o'clock in the morning, violent headache directly above the eyes; great ringing in the ears; I did not hear that a person had knocked at the door three times; on any one speaking to me it seems as if the person were at a great distance. No appetite for breakfast. One o'clock in the afternoon, the head is still very heavy; had very great palpitation of the heart. At noon I drank a glass of Bavarian beer: great eructations afterwards, tasting of the leaves. Two o'clock in the afternoon, the food has not any flavour; I feel as if I must vomit; great thirst; the feet feel as if filled with lead. Half-past 6 o'clock in the evening, had violent vomiting of a watery, mucous substance, followed by a taste of the leaves; great timidity; the whole day had roaring in the ears, as well as sparks before the eyes. Half-past 9 o'clock, great weariness; bowels unrelieved to-day; urine small in quantity and of a dark brown color.

8th of October. Did not sleep much in the night; bad taste in the mouth with great thirst; head still dull and confused. Five o'clock in the evening, the first motion for thirty-nine hours; it was hard and knotty. At midnight woke up with an urgent desire to evacuate the bowels, but still without action.

9th of October. At 9 o'clock in the evening masticated four leaves. Had one motion during the day, and normal; I was walking about the whole day, and was sadly tired. From 6 to a quarter to 9 o'clock, drank four glasses of Bavarian beer, a quantity which I have frequently taken without any inconvenience. During the process of mastication I went to bed. Ten minutes after had pressure in the [illegible] vision; sparks pass downwards befor[illegible] great palpitation; broke out [illegible] more violent over the [illegible] o'clock at night vomited [illegible]

Fell asleep towards one o'clock at night, but was extremely restless; awoke at least six times before 3 o'clock. Bad dreams and constant perspiration. Slept tolerably well from 3 to a quarter to 7 o'clock.

10th of October. Rose at half-past 7. Great dulness in the head like the effects of a debauch; no appetite; coated tongue, and bad taste in the mouth. I will not take any more leaves to-day. Ten o'clock in the evening, bowels not moved to-day.

11th of October. Masticated two leaves at seven o'clock. Ten minutes after there were the usual scintillations before the eyes; ringing in the ears; headache until 10 o'clock; palpitation of the heart and great thirst; eructation with taste of the leaves; abdomen much distended. Seven o'clock in the evening, bowels moved for the first time for forty-one hours.

12th. Medicine discontinued. On undressing at 10 o'clock at night, I discover accidentally, on the inner surface of the thigh, a number of small pustules, of a red appearance.

13th. The pustules itched dreadfully during the night, so that I was obliged to scratch them till the blood came. At 7 o'clock in the morning I masticated two leaves; the former symptoms reappeared. Ten o'clock at night, the bowels were not moved before 8 o'clock, and were then costive; the spots which were scratched itch very much; fresh pustules have appeared.

14th. About 7 o'clock, masticated 2 leaves. The former symptoms returned; the abdomen greatly distended. At 3 o'clock in the afternoon had a costive evacuation.

15th and 16th October. No medicine taken. Felt quite well; bowels regular.

The 16th. There are no fresh pustules; the old ones do not itch so much.

17th October. At about a quarter to 8 o'clock, took two more leaves. The usual symptoms returned as well as the [illegible]ipation.

[illegible]th. A 7 o'clock a[illegible] in took two leaves. In ten minutes [illegible]ms had set in. About 5 P.M. [illegible]ry costive; more pustules have

made their appearance, and behind the knee-joint; the spots which were scratched itch horribly.

The remainder of the leaves I have used in the form of tincture, having first of all bruised them, and then poured on them about two ounces of spirit. Of the tincture thus prepared I have, since the 24th of October, taken, fasting, from 5 to 8 drops in a teaspoonful of water, of which I will hereafter render an account.

I must now allude to a very fortunate occurrence, and which I do not hesitate to relate.

As has already been mentioned, I have, for some time, frequently suffered from rheumatism; for it usually came on from the slightest cold. Since the 1st of October, when I commenced taking the leaves, I have not had any attack, although, from the present extraordinary weather, I am well convinced that I should, on several occasions, have been liable to take cold, and then certainly would have suffered from rheumatic pains. Hence, I believe that the juice of the leaves has really freed me from my rheumatic disorder.

Mention has likewise been made of an eruption which I have had for three years on the back of the hand. This was probably the result of the infection already spoken of, and which, in spite of every remedy, such as Kali bichrom., Acid. sulph., Acid. fluor., &c., &c., could not be entirely cured, but, on the contrary, extended more and more, as well as became redder; I am now happy to state that, after taking the leaves, the eruption soon ceased to spread, and gradually got paler, so that in some spots, where it was worse, it has entirely disappeared, and I venture to hope that the continued use of the tincture will entirely get rid of my obstinate complaint.*

Leipzig, the 1st of November 1856.

* It may happen that some persons may consider that this sixth proving having been made on an individual probably tainted with syphilis, [? Eds.] can be of no value, and should not be used for establishing the physiological action of Coca. On this point it may, however, be remarked, that the peculiar disturbance of the intellectual and digestive functions, as well as of the circulatory system, were so constant and evident in this prover, and were, for the

Seventh Proving.

Hermine Pekarek, 9½ years old, a healthy, extremely lively, and clever child.

The tincture was prepared from leaves in a dried state, which Professor Pöppig had placed in his herbarium 17 years before. It is of so faint a green colour, that it may almost be termed colourless as well as odourless.

On the 3rd of December she took fasting 10 drops, without any sensible effect.

On the 4th, 15 drops. The same results.

On the 5th, she took 15 more drops. In the evening, the child groaned whilst writing, which it not her custom, as she always sits upright. She is however not conscious of doing so. On drinking Lager beer she did not pass urine involuntarily during the night, as she constantly does after drinking it.

The 6th of December 15 drops. No change during the day. In the evening while writing, she again had the irregular or heavy breathing, which symptom had appeared on the previous evening. At half-past 10 o'clock, uneasy turning in bed, and

most part, in accordance with the symptoms determined in the other provers, that they can have nothing in common with the dyscrasia existing in the body for seven years, neither can the latter have caused, in the least degree, a predisposition for the symptoms detailed. If it is wished to display such rigour, and consistently to insist on a perfect integrity of the prover's organism, in all probability the greater part of our provers would necessarily be excluded, for it is certain that in many it was only the absence of any strict examination that prevented the discovery of any acute or chronic disorder, as well as organic defect. Such a painful, and, in fact, useless pedantry, would, no doubt, pitiably reduce our little band of provers, already too small, and would leave the required perfect and absolute health still as a pium desiderium.

We must, however, allow that it is quite otherwise with the curative power for the chronic eruption ascribed by the prover to the medicine in proving. It may be readily imagined that this observation is at present too much isolated, and is besides not yet confirmed by the fact of the perfect and lasting cure of the syphilitic complaint to attach to it any especial value. The appearance of red pustules on the thighs, cannot, without doubt, be ascribed to the Coca, for it may just as easily be considered as a symptom of the dyscrasia, and moreover has not been observed by any of the other provers. I have therefore marked it as doubtful in the collection of symptoms. As to the cure referred to, I have not at present made any further use of it, however interesting it may be, and calculated to lead to further experiments.—
R. MÜLLER.

repeated raising of the arm under her head. Indistinct speaking. (The child usually sleeps very soundly indeed, and scarcely ever dreams, or at least is not conscious of her dreams in the morning). On a light being brought in, she awakens, and stares at her mother and myself with widely dilated pupils, and it was a long time before she came to herself—a symptom which was so much the more remarkable, as ordinarily if awoke during the early part of the night, and offered something nice to eat, she wakens up immediately.

7th December. She complained in the morning of confusion in the head, which went away after washing and taking coffee. She took 15 drops after breakfast. About 10 o'clock had headache, again disappearing after dinner. In the evening she was quieter, sang less, and was employed with her doll, but became more lively on listening to our conversation, though furtively. Became tired early.

REGISTER OF SYMPTOMS.

Without extracting from the provings any especial indications for certain morbid conditions, and arranging more closely together the groups of symptoms having a peculiar individuality, I have contented myself with putting together the several results of the provings in a list arranged in accordance with well known principles, in which I have endeavoured to separate, as little as possible from each other, those symptoms which were closely related.

I have refrained from attempting any [illegible] of the pathogenetic action, for in the [illegible] character of the action of [illegible] morbid conditions, is [illegible] before us, and clear [illegible] trials; for clinical experi[illegible] ascertain, whether and how [illegible] are confirmed and extended by [illegible] rience at the bedside. Unhapp[illegible] experience that recently proved [illegible] therapeutically, have not by any [illegible] removing symptoms similar to those [illegible] *reports of* provers, they had induced [illegible]

This is not the place to determine whether that is owing to the negligence of the prover, to the imperfect proving, or to any other circumstance. It is certain however that it will be better not to be in such a hurry to jump at conclusions, draw parallels, and lay down indications, but to wait somewhat longer for the information and verification obtainable by means of clinical experiments.

A single examination of the symptoms arising from the proving, shews with certainty that the action of the Coca is principally, 1st, upon the brain (disturbed sleep, disordered vision and hearing), and 2ndly, on the respiratory organs, and that the symptoms on the former are of a narcotic, and on the latter of an asthmatic character.

That a considerable number of the symptoms are seated in the digestive organs, is on the whole of much less importance, for every medicine will cause more or less disorder in the stomach and abdomen, as they are the organs which become first and most prominently affected.

In the register of symptoms, besides those directly obtained from the provings, (to which in order that they may be readily verified, the contracted names of the provers are affixed,) there are some taken from Tschudi, the results of direct experiment upon himself, as well as a few observations of Tschudi's, Pöppig's, Schlechtendal's, and Johnston's, upon the symptoms of constant occurrence among the so-called Coqueros. The latter however, and as well as the other symptoms of a doubtful nature, are enclosed within brackets, and thereby separated from the rest.*

* We must crave our courteous reader's indulgence for any stiffness he may [illegible] in this translation. Our translator, though a good German scholar, [illegible]ble of rendering into clear and elegant English any ordinary [illegible] as many papers in this Journal testify, has found Dr. Müll[illegible]r too muc[illegible] for him occasionally. This has necessitated a [illegible]ms, whe[illegible] accuracy has been secured at, we fear, the [illegible] We [illegible] scarcely wonder at any one not a thorough [illegible] by a [illegible] who strings together such a row of con[illegible]aber auch weil eben erst,"—literally, [illegible] Perhaps Dr. Müller will take the hint [illegible]ly in future, if he would have his [illegible]w deserve.—[Eds.]

MIND AND DISPOSITION.

Nervous excitement of a disagreeable kind. (Pppg.)

Irritable humour with chilliness; weak and tired in the evening (as after a bad night's rest). (Rchb.)

Excitement and great cheerfulness in the evening: followed by sleep as usual, healthy. (Rchb.)

Excited imagination; wonderful visions, sometimes of indescribably beautiful and delightful forms, sometimes of horrible figures. (Tsch.)

5.—Changeable, mostly very peevish humour, very much disposed to dissipation. (Pppg.)

Quieter than usual, less given to make a noise or to sing; listening more to the conversation of others, furtive; in the evening. (Peck.)

Afraid of human society, inordinate desire for solitude. (Tsch.)

Mistrustful, irresolute, false and malicious character. (Tsch.)

Complete dulness of the intellectual powers. (Tsch.)

10.—Dull, apathetic existence. (Tsch.)

HEAD.

Slight giddiness in the forenoon when sitting down; and later when rising from stool. (Mllr.)

Slight giddiness on walking, with the feeling as if the body were drawn to the right side, for some minutes. (Mllr.)

Giddiness, though slight, on going out in the open air early in the morning, objects appearing to turn before the eyes; for an hour's time. (Rauch.)

Giddiness and dizziness. (Rchb.)

15.—Giddiness on quickly ascending a steep winding staircase, to which he had been accustomed. (Rch.)

Giddiness early in the morning for half an hour, alleviated by rest and a glass of wine. (Rchb.)

Giddiness and dizziness, an involuntary quick step when walking, the head inclined forward, with giddiness and fear of falling. (Rchb.)

There remains weight in the head, with ringing in the ears, after the disappearance of the headache, which had lasted two hours. (H.)

Giddiness, with pressure in occiput.

20.—Sleepiness at 9 o'clock in the forenoon, weight in the head (and slight headache from 11 o'clock). (Mllr.)

Dulness and confusion of the head. (Rchb.)

Confusion of the head early in the morning, disappearing after washing and coffee. (Peck.)

Weariness with giddiness and headache in the afternoon, especially in the forehead and occiput, with chilliness. (Rchb.)

Weakness in the afternoon, *occipital headache ; sleeplessness in the night.* (Rchb.)

25.—*Headache in the afternoon, with chilliness.* (Rchb.)

Headache in the afternoon (like catarrhal), with cold feet and unusual urging to stool. (Rchb.)

Violent headache, immediately over the eyes, with loud ringing in the ears. (H.)

Headache, at 10 in the forenoon, disappearing after dinner. (Peck.)

Rather violent *headache,* with sensation of dryness in the throat and humming in the ears (for two hours). When the headache supervened, then the disordered noises and illusions vanished. (H.)

30.—On coughing, and straining at stool, had a violent pain deep in the left frontal region, like a pressing asunder. (Kllbch.)

A pressing headache on the right side, and of the occiput, as well as of the right side of the forehead (though much slighter), with giddiness and chills after dinner; disappearing towards evening. (Rchb.)

Slight pressing pain in the fore-part of the head, the whole day. (Kllbch.)

Drawing in the head, as if from great exhaustion; flame-like appearances before the eyes, in flashes like distant lightning. (Rchb.)

Drawing, beginning in the occiput, extending to the temples, on attempting to read, throughout the afternoon. (Rchb.)

EYES.

35.—Hollow, dull eyes, surrounded with violet-brown coloured circles. (Tsch.)

Pain in the eyes, as if from weariness. (Rchb.)

Watering of the right eye, with slight reddening of the conjunctiva and lids, at the inner angle, early on awaking. Slight mucous discharge in the right, and a little in the left eye, the whole day. (Mllr.)

Great intolerance of light, with dilated pupils. (Tsch.)

Momentary darkness before the eyes, on ascending the stairs, in the forenoon. (Mllr.)

40.—White spots before the eyes, so that on reading the book seems marked white. (Rchb.)

Dulness in the head, with flying of fiery points from above downwards, and swimming together of the letters. (H.)

White spots and glittering serpentine lines before the eyes, with great weariness, on going out after dinner, for an hour. (Rchb.)

45.—*Scintillations before the eyes; the letters vanish by degrees from the paper;* sensation as if writing with two pens; *fiery points fly before the eyes* (for 10 minutes). A sensation gradually comes on as if some one were knocking above the eyes, with loud ringing in the ears. (H.)

Flame-like appearances before the eyes, in flashes like distant lightning, morning and evening. (Rchb.)

EARS.

On empty deglutition, a crackling in both ears. (Kllbch.)

Audible pulsation in both ears. (Kllbch.)

Singing in the left ear, for several minutes, recurring in the evening. (Kllbch.)

50.—*Humming in the ears.* (Kllbch.)

Loud ringing and humming in the ears. (Kllbch.)

Continued feeling of deafness, without any injury to the hearing. (Kllbch.)

On reading loud in the room, had the sensation as if the tympanum were pressed outwards by the sounds, or as if the latter only reached the ear through a thick medium; at the same time pulsation and dull humming in both ears; in the forenoon. Towards 7 o'clock in the evening all the ear symptoms had disappeared. (Kllbch.)

55.—Feeling of deafness in both ears, although the hearing

itself is as good as usual; a continued feeling as if something were going on in the ears which would cause deafness. (Kllbch.)

Difficulty of hearing; it seems as if the sounds came from a greater distance; in the forenoon. (H.)

FACE.

Pressing pain in the zygoma of right side. (Rchb.)

Nauseous, blackish border of the angle of the mouth. (Tsch.)

Pain in a hollow tooth, at noon and evening. (H.)

60.—Pale lips and gums, with green, blunt teeth. (Tsch.)

THROAT.

Dryness in throat and mouth, with thirst in the morning. (Rch.)

Sensation of dryness in the throat, with headache and humming. (H.)

Frequent sensation of swelling of the velum palati, rendering deglutition difficult; once with tickling, inducing cough. (Mllr.)

Early in the morning, after a very comfortable sleep, a sensation of dryness in the throat, very disagreeable on swallowing, as if swollen, disappearing in 10 minutes. In two hours after, the same feeling in the throat, with scraping of the swollen uvula, frequently causing hawking and mucous expectoration: for an hour long. (Mllr.)

65.—A distinct feeling of swelling of the uvula, difficulty of swallowing, swelling of the uvula without any particular redness; lasting from 5 o'clock in the afternoon through the whole evening. (Mllr.)

Early, on awaking, pain on swallowing, with great swelling of the uvula. (Mllr.)

Pain of the uvula, rather violent on swallowing, with feeling of swelling, becoming worse in the evening, with actual elongation and reddening of the uvula and its vicinity; gradually subsiding on the next day. (Mllr.)

DIGESTION.

Great appetite, and ate much at dinner. (Mllr.)

Want of food at an earlier hour in the forenoon, notwithstanding distension of the abdomen as if from an overloaded stomach. (Rauch.)

70.—Sudden voracious appetite, especially for animal food, contrary to usual habit. (Pppg.)

Notwithstanding great hunger and good appetite at noon, was quickly satiated. (Mllr.)

Not hungry at noon, as usual, nevertheless ate a good deal and with appetite. (Mllr.)

Loss of appetite, mucous taste. (Rchb.)

Loss of appetite. (Pppg.)

75.—Loss of appetite, soon satiated, coated tongue, mucous taste, and slight fever. (Rchb.)

Loss of appetite, at noon, especially for meat. (Rchb.)

Sometimes aversion to all food, with sudden voracious appetite, especially for animal food. (Pppg.)

Musk-like taste in the mouth. (Rchb.)

Water has an empyreumatic flavour. (Rchb.)

80.—A metallic taste after taking the drops; butter tastes like herrings early in the morning. (Rchb.)

Mucous eructation. (Rchb.)

Great and loud eructation, without taste or uneasiness in the stomach; early. (Mllr.)

Eructation sometimes after partaking of coffee as usual. (Rauch.)

Eructation with taste of the leaves masticated; in the evening. (H.)

85.—Slight erucation after dinner. (Rauch.)

Great eructation in the forenoon, almost every quarter of an hour, without taste, and fulness in the stomach; frequent yawning with sleepiness on sitting. (Mllr.)

An unpleasant taste in the mouth on waking early in the morning, and not the usual appetite; eructation and fulness in the stomach, with constant effort at eructation, for three hours; ate with appetite at dinner, though soon after the distension of the stomach and constant eructation returned. (Mllr.)

Loss of appetite, vomiting, great thirst, with feet heavy as lead. (H.)

Great stupor in the head, loss of appetite, coated tongue, and bad taste in the mouth. (H.)

90.—Diarrhœa and loss of appetite; in the afternoon bad *headache in the occiput, with chilliness and mild fever*, but good sleep in the evening. (Rchb.)

Violent vomiting of a mucous fluid, in the evening with an after taste of the leaves. (H.)

Great nausea, vomited twice with after taste of the leaves, at night. (H.)

Great nausea after breakfast, no appetite at noon. Vomited twice in the evening severely, a mucous watery substance, without bitter or sour taste, but followed with a strong taste of the masticated leaves. (H.)

Dyspepsia, tasteless eructation, nausea, great weariness. (Rchb.)

95.—Dyspepsia and liquid stool. (Rchb.)

Bilious disorder, obstinate constipation, jaundice, headache, debility, emaciation. (Pppg.)

Chronic gastric disorder. (Tsch.)

(Increase of digestive powers.) (Schlechtendl.)

Subsidence of all the symptoms after dinner, (grumbling, rumbling, eructation, oppression of the chest, and stitches in the thorax.) (Rauch.)

100.—The headache disappeared after dinner. (Peck.)

STOMACH.

Distension of the stomach with dyspnœa, early on awaking. (Mllr.)

Afternoon, unusual fulness in stomach, abdomen and chest; great eructation, no inclination or ability for work; stool normal. (Mllr.)

At noon a peculiar feeling of emptiness in the stomach and abdomen; when walking a painful contractive sensation in the stomach, and close to the latter on the left side a pain similar to the so-called stitches in the spleen. (Mllr.)

Had fulness of the stomach after eating abundantly at noon. (Mllr.)

ABDOMEN.

105.—Great abdominal distension with constipation. (H.)

Distension of the abdomen with constipation and a costive motion. (H.)

Tympanitic distension and tension of the abdomen. (Rauch.)

At 10 o'clock in the forenoon a peculiar rumbling in the abdomen with a sensation of emptiness, hunger, and stitches in the spleen. (Mllr.)

Violent stitches in the spleen, at 5 o'clock in the afternoon, when walking; in this instance the pain, situated below the first and second left false ribs, prevented walking; in 10 minutes this had disappeared. (Mllr.)

110.—On beginning to walk had again the same pain under the left ribs, for 5 minutes time. (Mllr.)

Bellyache, especially in the jejunum and ileum, subsiding on taking warm soup as well as by repeated pressure on the epigastric region. (Rauch.)

Slight gripings in the small intestines, cutting, drawing, gnawing without rumbling from 6 o'clock in the evening until 11 o'clock in the forenoon, alleviated by walking quickly. (Rauch.)

Bellyache, beginning again in the morning, aggravated by coffee, ceasing about 5 o'clock in the evening after a draught of cold beer. (Rauch.)

Bellyache in the evening, renewed by a cup of chocolate, with urging to stool, which was scanty and hard, followed by a sensation of paralysis of the sphincter. The pain in the abdomen then became more violent, colicks, accompanied with debility, drowsiness, frequent gaping and paleness of the face.

Pulse 76, rather feeble. At 9 o'clock at night was unable to remain out of bed. (Rauch.)

115.—Violent bellyache, [illegible] from flatulency, tym[illegible] of [illegible] diminished by a frequent [illegible]

Palpabl[illegible] in 10 minu[illegible] colon (Rauch[illegible]

Rumbling in the abdomen as if from flatulency, with eructation without taste or smell. (Rauch.)

Continual urging to break wind without discharge. (Rauch.)

Discharge of flatulency with urgency to stool. (Rauch.)

STOOL.

120.—Irregularity of stool. Constipation with uneasiness in the abdomen. (H.)

Constipation for 41 hours. (H.)

No desire for stool at the usual time early; no evacuation the whole day, notwithstanding every effort; awoke at 11 o'clock at night with great urging to stool, followed by an abundant firm evacuation. (H.)

Urging to stool, in the afternoon, with headache and cold feet. (Rchb.)

Urging to stool in the afternoon, not followed by diarrhœa or any other symptoms. (Rchb.)

125.—Scanty hard stool followed by a sensation of paralysis of the sphincter. (Rauch.)

Normal stool twice in the day, according to usual habits. (Mllr.)

Stool earlier than usual in the morning, and thinner; for three minutes after had still the feeling of want of further evacuation, without any taking place. (Rauch.)

Soft stool of a normal colour. (Rauch.)

Stool as if from a mild aperient. (Tsch.)

130.—Liquid stool, early in the morning. (Rchb.)

Two liquid stools, without any further symptoms. (Rchb.)

URINE.

Dark brown urine. (H.)

Scanty dark brown urine. (H.)

(Absence of the usual incontinentia urinæ nocturna.) (Peck.)

RESI[illegible]ATORY ORGANS.

)

[illegible] during the day while smok-
[illegible]llbch.)

Great tickling and irritation in the trachea and larynx, causing cough in the afternoon, for an hour. (Rauch.)

Frequent irritation in the throat, in the afternoon, exciting cough. (Mullr.)

Frequent dry cough in the evening in bed, as if in catarrh of the air passages. (Rauch.)

140.—Irritation in the larynx in the afternoon, exciting cough, while sitting quietly in the room, gradually ceasing after coughing from 15 to 20 times.

Morning cough with expectoration of an adhesive, thick, whitish yellow mucus, as in chronic bronchitis, with dryness in the throat and mouth, with thirst. (Rauch.)

Easy breathing on walking quickly and going up ascents. (Mllr.)

Great ease in ascending and running amongst the high mountains, without any difficulty of breathing. (Tsch.)

Oppression of the chest. (H.)

145.—*Oppression of the chest*, with a sensation of fulness in the regio epigastrica et mesogastrica. (Rauch., after 2½ hours.)

Oppression of the chest in the forenoon. (Mllr.)

Oppression of the chest, probably the result of severe palpitation. (H.)

Weight on the chest, causing deep inspiration; neither painful nor disagreeable; when walking and ascending stairs. (Mllr.)

Rather painful weight on the chest, with constant necessity to inhale deeply, when sitting in the evening; sensation as if the lungs were too much distended; difficulty of breathing even in bed; palpitation, with a weakness of the whole body, though not disagreeable, as if from great exertion. (Mllr.)

Peculiar weight in the chest with shortness of breathing, while walking slowly at seven o'clock in the evening; at the same time there was very decided pain on swallowing at a small spot on the right side near the uvula, as if from soreness and swelling. (Mllr.)

150.—Weight on the chest and dyspnœa in the forenoon when walking; occasionally a decided painful pressure on the chest, though affecting the breathing much less. (Mllr.)

Dyspnœa and pressure on the whole of the chest, with constant inclination to inspire deeply, as if something could be breathed away the whole of the forenoon. (Mllr.)

Shortness of breathing, especially on making an ascent, in the forenoon. (Mllr.)

Groaning, irregular, heavy breathing in the evening when writing, though unconscious of the same. (Peck.)

Fugitive stitches in the left lung between the third and sixth ribs, increased by deep inspiration. (Rauch., after two hours.)

EXTREMITIES.

155.—A painful paralysis of the fourth and fifth fingers of the right hand, especially on stretching them out, and grasping anything, without any external painfulness, throughout the day. (Mllr.)

Paralysis and pain, not only in the fourth and fifth fingers, but likewise in the corresponding muscle of the border of the hand, (the abductor digiti minim., &c.); on firmer pressure there was also painfulness deep in the flesh, as if after a blow or great exertion; for two days. (Mllr.)

On awaking early in the morning, pain in the muscles of the right forearm, on the outer border of the radius, on moving or on pressure, as if from a violent blow; the pain remained through the day, and in a less degree through the following, but on the first day it was very violent, quite as if the part must be red and blue, without anything being perceptible. (Mllr.)

Great weight of the feet, with nausea. (H.)

A peculiar twitching, tearing pain in the great toe of the right foot, occurring suddenly in the day and even in the night, without impeding the motion of the toe, nor walking, and not excited or increased by external pressure. (Mllr.)

160.—Small red pustules on the inner surface of the thigh and in the bend of the knee, itching at night so as to cause scratching until the blood came.

CIRCULATION.

the evening in bed. (Mllr.)

or ten minutes, in the forenoon, causing

(H.)

Great anxiety and severe *palpitation*, with breaking out of great perspiration, in the evening while in bed. (H.)

Pulse weak, quickened, small, rather low throughout the day. (Rauch.)

165.—Pulse low, 76 beats, with abdominal pain, sleepiness, and paleness of the face. (Rauch.)

Fever and great feebleness, ameliorated by wine in the afternoon. (Rchb.)

Great throbbing of the temporal arteries, with heat and sleeplessness, at night in bed. (Rchb.)

SLEEP.

Frequent yawning while walking in the forenoon, without weariness. (Mllr.)

Feeling of weakness and sleepiness in the morning. (Rauch.)

170.—Great weariness, with pain in the eyes in the forenoon. (Rchb.)

Extraordinary sleepiness in the morning, closing of the eyes while writing. (Rchb.)

Great sleepiness and headache, in the forenoon, in a cool room; disappearing soon in the open air. (Mllr.)

Insuperable somnolency while at dinner, for an hour long, (after rather a sleepless night). (Rchb.)

Great sleepiness in the evening. (Peck.)

Great weariness in the evening. (H.)

Deep, sound sleep the whole night. (Rchb.)

Very deep and sound sleep, with pleasant dreams. (Mllr.)

Sleepiness in the evening without being able to go to sleep when in bed. (Rchb.)

180.—Great wakefulness in bed, until 4 o'clock, notwithstanding some slight sleepiness, then comfortable sleep until 7 o'clock in the morning. (Rchb.)

Sleepiness in the evening, much earlier than usual, without being able to sleep when in bed. From wakefulness, heat and great throbbing of the temporal arteries [illegible] midnight. (Rchb.)

Sleepiness and weariness the [illegible] an hour and a half by [illegible] through the ordinary occ[illegible]

Sleeplessness on going to bed early with a crowd of thoughts and shivering, so that he was obliged to get up again about 11 o'clock, remained perfectly awake, troubled occasionally with an aching pain in the eyes, and worked until 2 o'clock in the morning, then had comfortable sleep. (Rchb.)

Sleepiness, but with inclination to work throughout the night. (Rchb.)

After an hour and a half's sleep in bed (from 10 to ½-past 11 o'clock in the evening) had again great briskness of feeling and wakefulness, attended, however, with shivering, vertigo, and fever; crowding of the thoughts and grief; sleepiness until 2 o'clock, then perspiration, rest and sleep. (Rchb.)

185.—Restless jactitation in bed at night, repeated lifting up of the arm under the head, and incoherent talking during sleep. (Peck.)

Great uneasiness, discomfort, and sleeplessness during the night. (Pppg.)

Chronic sleeplessness. (Pppg.)

Disturbed sleep, with frequent waking, unpleasant dreams, and constant perspiration. (H.)

Sudden twitches, starting and awaking in the usual short sleep after dinner. (Mllr.)

190.—Difficulty of being roused from sleep, eyes staring, dilated pupils, and unconsciousness. (Peck.)

Waking up at an early hour. (Rchb.)

GENERAL SYMPTOMS.

Feeling of sprightliness and vigour the whole day, notwithstanding the little sleep the preceding night. (Rchb.)

Surprisingly fresh, lively, disposed to walk, in the course of the forenoon. (Mllr.)

Extraordinarily well, lively and disposed to work the whole of the forenoon, notwithstanding having worked the previous night till 3 o'clock in the morning. (Rchb.)

[illegible] ng, and *feeling of freshness and vigour* [illegible] pleasure in walking quickly and [illegible] *heat* and great power of the sun,

Great ease in ascending the high mountains, and running on them without any difficulty of breathing. (Tsch.)

Great bodily vigour, and endurance of great fatigue, notwithstanding extremely little nourishment and sleep. (Tsch.)

Feebleness the whole day, better in the evening. (Rchb.)

Great feebleness and languor in the early part of the forenoon after a good night's rest. (Mllr.)

200.—Surprisingly inactive, tired, even sleepy with frequent yawning, the whole of the forenoon. (Mllr.)

Great exhaustion the whole day. (Rchb.)

Great anxiety, humming in the ears the whole day, and sparks before the eyes. (H.)

Great satiety, without need of nourishment, for a surprisingly long time. (Tsch.)

Very little need of food, even with hard labour, and unusual vigour. (Tsch.)

205.—A nourishing and soothing remedy, that is to say, for weakness of stomach and resulting constipation, colics, and hypochondriacal sufferings. (Schlech.)

Uncertain, tottering gait; flaccid skin, of a greyish yellow colour; hollow, lustreless eyes, surrounded with violet brown circles; trembling lips, incoherent discourse; dull, apathetic existence. (Tsch.)

Very disagreeable perspiration, offensive breath, pale lips and gums, green stumpy teeth, and a disgusting blackish border round the corners of the mouth. (Tsch.)

(Protraction of the change of material, diminution and prevention of the natural loss of tissues which attends every bodily effort). (Johnst.)

A sort of anæmia, a leaden colour of the skin, and sleeplessness. (Pppg.)

210.—Œdematous swellings, subsequently ascites, pains of the limbs, removed in a short time by the breaking out of boils; general emaciation and [illegible] (Pppg.)

Premature old age, and [illegible] (Tsch.)

Masticating [illegible] the mouth, with almost no [illegible] (Tsch.)

THE PURE EFFECTS OF SULPHUR.

By Dr. F. Wurmb.

(continued from page 396.)

VII.

Dr. William Huber proved high dilutions and low triturations of Sulphur.

A.—TRIALS WITH HIGH DILUTIONS.

a. Sulphur 101.

On the 6th of June, 1846, at 7 P.M., he took 5 drops. In two hours, when in bed, he had a violent rush of blood to the head, and felt all the arteries in his head beating; heaviness and confusion of the whole head; roaring in both ears; together with dull drawing, throbbing pain deep in the right side of forehead, which was at times more violent, and again less so; it lasted half an hour. Slept well.

On the 7th he woke at an unusual hour, namely, at 5 A.M., with aching throbbing headache in the right half of the occiput, and pain in the left side of the small of the back. The former went off in half an hour, the latter after getting up out of bed. On stretching out the legs in bed he had a very painful cramp in the right calf. At 8 A.M. every time he made a step up stairs he had shooting dislocation pain in the metatarsal bone of the right great toe. The same pain occurred also in the afternoon when walking, but then beneath the left outer ankle. At 6 P.M. he took 10 drops. In the course of two hours, at every step he felt a cramp-like pain in the left calf, and pains in the corns of the left foot.

8th. No medicine and no symptoms.

9th. He took 15 drops at 6 P.M. Four hours afterwards, when in bed, he felt a rubbing dry sensation (like sand) in the mucous surface of the eyelids, and at the same time a sense of heat in the skin of the whole body, with tendency to perspire, and a slight threatening of a headache on the left side of the
omfortable dreams of murders, from
ing very tired, and with aching
small of the back.

10th. He took 20 drops at 3 P.M. After four hours, sudden, oft-recurring, dull drawing pain in the left side of the forehead, which (in the house and out of the house) alternated with a similar pain, now in the right side of the forehead and now in the right parietal region; when walking, frequent dislocation pain over the left inner ankle. At night in bed, drawing pain penetrating into the marrow of the bones (similar to the pain that occurs when we hold a piece of ice a long time in the hand), now in the metacarpal bone of the right fore-finger, now in the right knee-joint, but never lasting beyond a few seconds. Night undisturbed.

11th. On awaking in the morning, transient colic-like pains in the bowels below the navel, as from an accumulation of wind; dislocation pain in the left knee while walking. At 8 A.M. pressive pain on both sides of the sagittal suture. At 10 A.M. shooting pain as if in the left pleura. At 7 P.M. when standing several throbbing shoots in the rectum, from the border of the anus through the bowel and into the right hip. At 8 P.M. he took 25 drops. Soon afterwards shoots as from a fine needle in the left great toe. At night great flow of water from the mouth.

12th. Frequent fine burning stitches in different parts of the skin of the left upper eyelid, as if from fine sparks; cramp-like painful drawing from the right inner through to the outer ankle (when at rest).

13th. He took 30 drops in the morning. About noon, both when at rest and when moving, he had frequently-recurring, very troublesome, cramp-like drawing in the muscles of the anterior internal surface of the right thigh, followed by sudden aching tension in the left side of the occiput.

14th. In the morning, when walking, aching tension in the whole of the right calf (as if it were too short, and made of wood), lasting half an hour, and then giving place to a short tensive aching in the left side of the occiput. About noon he took 30 drops, soon after which he had a sudden, oft-recurring, dull drawing deep in the left side of the forehead.

During the following [illegible] days, when he ceased taking the medicine, he fe[illegible]

b. Sulphur 102.

On the 23rd June Huber took 15 drops. No symptoms.

24th. In the morning 24 drops. In the course of the forenoon frequent recurrence of a dull, drawing, penetrating pain, now in the right hip-joint, now in the left forehead, and now in the left occiput. About 4 P.M. an unusually hard stool. An hour later dull digging pain in the left side of the forehead, with confusion of the whole head; dimness of vision of both eyes, with great sensitiveness to bright daylight; forgetfulness.

25th. In the morning 25 drops. In the forenoon frequent painful drawing through the metacarpal bone of the left forefinger. In the outer canthus of the right eye, itching, shooting, and sensation as of fine sparks in the skin of the right upper lid.

26th. In the morning 25 drops. Towards noon dull drawing frontal headache, which, after a few minutes, alternated with a similar pain in the right wrist. Between 4 and 5 P.M. boring shooting pain, now in the right groin, now in the spermatic cord, extending to the testicles, now within the inguinal ring in the abdominal cavity; followed by sharp cutting pain in the right great toe. Between 7 and 8 P.M., when walking, cramp pains in the lower part of the left calf, and dislocation pain in the left ankle-joint.

27th. In the morning 30 drops. After dinner several fine stitches in the right concha, and cramp-like drawing below the right mastoid process. Soon afterwards great flow of saliva into the mouth, and sudden softly digging pain in the right parotid gland; followed by sharp stitches, now in the left great toe, now in the left thumb, and a sensation like sparks in the left upper lid.

28th. In the morning on awaking aching tensive pain in the left side of the small of the back, extending to the neighbourhood of the left great trochanter. After getting out of bed this pain went off. About 9 A.M. a burning place, about a hand's [illegible] xtent, in the skin of the left elbow-joint; the [illegible] radually over the extensor side of this [illegible] minutes. About noon nausea,

coming up from the stomach, with heat of the face. In the afternoon confusion of head with rushing out at the left ear, and dull drawing pain on the left side of the forehead, which soon alternated with a penetrating cramp-like pain in the left knee-joint, or the left wrist, or with a shooting pain (like fine needle pricks) in the root of the nail of the right great toe; at the same time, whilst walking, frequent cramp-pain in the left calf. In the evening in bed several very sharp shoots (as from a blunt nail) in rapid succession at the root of the nail of the right great toe.

29th. In the morning after getting up, dislocation pain, on walking, in the left hip. An hour after taking 40 drops: confusion of head with dull aching pain in the forehead, and such great dimness of vision (on reading), as if the cornea had lost its transparency; at the same time feeling of dryness (as from fine sand) between the eyelids. In the afternoon frequent alternation of frontal headache with the pain in the joints described the day previous.

30th. In the evening in bed, on stretching out the legs, very painful cramp in the left calf, causing him to cry out; it lasted from fifteen to twenty seconds. This cramp continued to annoy him long after completing the proving.

B.—Experiments with triturations.*

a. Sixth trituration of Sulphur.

On the 4th August, 1846, about 6 A.M., Huber took 25 grains. Thereafter (11 A.M.) frequent attacks of a dull headache, deep in the left side of the forehead, when at rest and when moving, which sometimes increased to a drawing throbbing pain. About 2 P.M. dizzy confusion of the head, heat and redness of the face, with sensible throbbing of all the arteries of the head and neck, followed by breaking out of perspiration in the face (lasting more than a quarter of an hour). About 4 P.M., and all the afternoon, constant pain in the corns as if the boot pressed on them, and frequent alternation of a drawing

* These were made in the proportions of 10 to 90.

penetrating pain, combined with feeling of stiffness, now in the joints of the left great toe, now in the right ankle-joint, now in the ligamentous connexion of the right ankle with the metatarsal bone (at rest and when moving).

At night in bed rush of blood to the head, with heat and confusion of it; noise like boiling water out at both ears, and frequent painful drawing in the right ear. Night very restless. After midnight, cramp-like, penetrating pain, extending from the metatarsal bones to the sole and first joints of the toes of the left foot, which after lasting a short time, was succeeded by a precisely similar pain in the right foot. In the morning he was tired and unrested. The hollows of each concha, and both external meatus were unusually moist from a viscid fluid wax.

5th. At 7 A.M. he took 25 grains. In the forenoon some violent shoots, now in the left, now in the right great toe. In the afternoon, drawing pains (when at rest), now over the left inner ankle, now in the shoulder-joint; now in the right, now in the left wrist; often alternating with sharp shoots in the rectum. In the evening sudden shooting itching in the navicular fossa of the urethra.

b. Fifth trituration of Sulphur.

On the 6th August, about 8 A.M., he took 5 grains. In an hour a series of symptoms in the left foot, namely, first a painful drawing in the proximate joint of the great toe (at rest), afterwards (when moving) a cramp-like penetrating pain, at one time in the inner ankle, then in the lower part of the calf; again in the knee-joint and in the inguinal region. In the afternoon a series of symptoms on the right side of the body; a precisely similar pain, first in the right metatarsal bone, then in the right elbow-joint, then in the wrist, and lastly in the metacarpal bone of the right hand; always lasting a few minutes, whether at rest or in motion.

7th. At 7 A.M. 10 grains. In an hour cramp-like drawing pain (when at rest or in motion) in the right inner ankle, with a dull drawing pain in the right side of fore- feeling of burning in the skin of the whole upper arm, which lasted above a

quarter of an hour, and after scratching left a raw pain. In the afternoon burning shooting beneath the lids of the left eye, as though sand had got into it. On moving, cramp-like tensive pain, now in the muscles posteriorly of the left thigh, now in the left calf, now in other muscles of the extremities. Between 10 and 11 P.M., in bed, a cramp-like drawing pain, penetrating from the right knee outwards in the joint, which sometimes alternated with a precisely similar but slighter pain in the left knee joint; the abdomen was at the same time distended with flatus, which had an intolerable smell of sulphuretted hydrogen, and was passed in great quantity, but was soon reformed to be again passed easily. About 3 A.M. a very severe cutting pain, darting like lightning from the deltoid muscle to the middle of the right upper arm.

c. Fourth trituration of Sulphur.

8th August. In the morning 5 grains. After rising from bed, itching on several parts of the skin of the left hand (dorsum of hand, over the proximate joint of the middle finger, on the outer border of the little finger, and on the palmar aspect of the wrist); after scratching red spots arise, on which several papulæ close together appear (these papulæ lasted several days, and itched periodically). In the forenoon, three hours after taking the medicine, dislocation pain in the left hip (when walking and standing), and shooting here and there in the skin. In the afternoon frequently the before described gouty pains in the joints of the extremities (like those experienced by gouty people on a change of weather—we then had the finest weather), alternating with cramp-like pains in their muscles; the former came on mostly when at rest, the latter when moving. At night an[illegible] from fire and water.

9th. In [illegible] in eyes, with raw p[illegible] more taken. During the d[illegible] of both mastoid [illegible] waking.

d. Third trituration of Sulphur.

10th August. In the morning 5 grains. In the forenoon loss of appetite, vertigo, confusion of the head, dimness of vision, constant sweating and frequent itching in the left external auditory meatus.

11th. In the evening 10 grains. In half an hour (when at rest) dull drawing headache in the left side of the forehead, with a similar pain, now in the left knee-joint, now in the left outer ankle, now in left wrist.

12th. In the morning 15 grains. In half an hour, in bed, aching tension at the left side of the small of the back and the hip, then sudden sharp cutting pain through the right knee, from the bend to the patella, which alternated, after a few minutes, with an exactly similar pain from the bend of the left elbow to its apex. After getting up the pain in the back went off, but in place of it there occurred feeling of roughness in the interior of the throat, hoarse voice, deeper tone of the voice, and a constant irritation causing dry cough. There was the usual morning stool, but to-day it was less in quantity; the first part of the motion was hard and lumpy, and in its passage through the rectum caused a raw, shooting pain; the last part was soft and of the color and consistence of bird-lime. All the forenoon unusual weakness and dimness of the eyes, followed by frequent dry tussiculation. About noon some sharp shoots in the urethra. In the afternoon (when driving in his carriage) headache in the whole of the left side of the cerebrum, afterwards (when at rest) a short shooting, cutting pain above the anterior superior spinous process of the right ilium, followed by cramp-like pains in the muscles of the left upper arm on its flexor aspect. At night in bed drawing in the right upper row of teeth, and somewhat later distension of the abdomen, griping, and frequent emissions of flatus smelling of sulphuretted hydrogen.

13th. No symptoms beyond dislocation pain (when walking) [illegible] sacral region [illegible] hip, and some shoots in the left

a sudden, sharp, cutting pain
great toe. In the afternoon

some shoots in the left tendo Achillis. At night, in bed, for some seconds, penetrating cramp-like pain in the left metacarpus.

e. Second trituration of Sulphur.

15th August. In the morning 5 grains. In half an hour, aching in the pit of the stomach, and a sensation like scratching in the stomach; after a time, aching tension in the left sacral region and hip, and in the whole extent of the pelvis, sometimes so violent that the pelvic bones seemed to be separating; this lasted half an hour (in bed). After getting up, urging to make water, with cutting pain (as in strangury) over the symphisis pubis. The whole forenoon sprained pain in the left hip-joint (on walking), and very often gouty pains in the joints of the extremities, alternating with cramp-like pains in their voluntary muscles (when at rest and in motion). About 2 P.M. (when at rest) several violent shoots in the tendo Achillis near the os calcis. In two hours dull aching in the whole of the right half of the brain, dimness of vision and weakness of both eyes, with innumerable confused dark spots floating before the eyes (myodesopsia); after this, long-continued giddy confusion of the whole head. At night, in bed, a semi-lunar painful drawing in the root of the nail of the right little finger.

10th. In the morning 10 grains. In half an hour (in bed) aching tension in the left sacral region and hip, lasting several minutes, and soon reappearing. After this, very violent piercing, cramp-like pain deep in the right orbit (probably in the muscles), which, as far as he could judge, seemed to extend through the bony wall of the orbit into the frontal sinus; it lasted a few minutes, and then alternated with a similar pain in the left orbit. After rising from bed a hard motion, causing pain in its passage through the rectum. About 10 A.M. a pretty violent drawing in the left temple, which only lasted a short time. Before dinner he observed, on the inside of the lower lip, a vesicle the size of a hemp seed, filled with dark blood, but it did not annoy him much, and after dinner was found to have disappeared without leaving a trace behind. In the afternoon, in addition to a frequent alternation of the

already described pains in the head and joints, there occurred a violent, cramp-like, tensive pain close to the right mastoid process (when at rest), which seemed to pierce into the deepest parts of the bone; it lasted a few seconds, and then made way for a shooting pain in the right temple. In the evening (when at rest) a sharp cutting, from behind forwards, along the inner border of the left great toe.

17th. In the morning 20 grains. On the mucous membrane of the right under lip, two aphthæ, which went off in two days. Two hours after taking the medicine, sudden drawing above the right eyebrow, and afterwards (at every step) dislocation pain in the left knee and ankle. At night, in bed, a pain, piercing through the right knee-joint, which lasted from twenty-five to thirty seconds, and was followed by a sharp shooting pain under the nail of the right great toe. At night erotic dreams.

18th. In the morning, after awaking, painful rubbing dry feeling in the borders of the right eyelids, with cramp-like penetrating pain in the right mastoid process; after this, dryness of the tongue, which, after a quarter of an hour, gave place to slimy taste in the mouth. In the forenoon painful cramp-like tension, now in the muscles of the anterior internal aspect of the left thigh, now in the left calf. On the internal surface of the left lower lip he observed a group of greyish-white aphthæ, which were rather painful; after a time several aphthæ appeared on the right upper lip (they lasted a week). About 4 P.M. griping in the bowels from the umbilical region to the symphisis pubis, coming in fits, and followed by a diarrhœic evacuation of a yellowish-green, pappy, slimy mass.

19th. Feeling of tiredness in the left leg; cramp-like penetrating pain in the left metatarsal bones, and pain in the left sole as if it were ulcerated.

f. First trituration of Sulphur.

20th August. In the morning 5 grains. In half an hour, in bed, violent pain in the left sacro-lumbar region, worse on turning in bed. After getting up, a hard motion, which causes ting in its passage through the rectum; afterwards (on g a step) shooting dislocation pain in the left hip, which

throbbing of all the arteries of the head; painful dry sensation in both eyes; aching tensive pain in the sacro-lumbar region; prickling warm feeling all over the skin, with disposition to perspire; and troublesome burning feeling which extended from the shoulder over the left upper arm and between the scapulæ.

23rd. In the forenoon, at every step, sore feeling in the abdominal parietes, as if the muscles of the abdomen and the peritoneum had been bruised. About noon (when at rest and in motion), in the muscles of the left upper arm, close to the bend of the elbow, a cramp-like pain, which, in the course of two hours, gave place to an exactly similar pain in the sinews of the left popliteal space. About 4 P.M., at first some griping in the bowels, then call to stool, followed by a pappy motion of yellowish-green colour, in moderate quantity.

24th. In the forenoon, frequent alternation of headache (at one time in the forehead, at another in the occiput) and the previous (gouty) pains in the joints, but only when at rest; when walking dislocation pains in the left hip, and at the head of the left fibula, causing him to limp. About noon, burning hot feeling in the skin of the whole back, especially annoying between the scapulæ, lasting more than half an hour, and after scratching turning into sore pain. In the evening, for a few seconds, shooting pains in the right side of the chest (judging by the feeling, in the pleura), and several shoots through the arms, like lightning; followed by burning pain in the skin of the whole extensor surface of the left elbow-joint.

25th. In the morning burning and redness of the skin of the whole of the dorsum of the right hand, as if an eruption were about to appear. In the afternoon violent burning in the skin of the whole back, with perceptible throbbing in the arteries beneath the skin at the affected part. In the evening several jerking, lightning-like shoots in the rectum. The night's rest was often disturbed owing to burning pains in the parts of the skin lain on.

se symptoms recurred on the following days. The in the joints lasted the longest, together with the skin, the shoots in the anus, and the cramp-like in the left mastoid process.

"Sulphur," says Dr. Huber, "acted on both the animal and the vegetative sphere. I will here only allude to its action on the sensibility, as it seems to be subject to certain laws, which may throw some light on the characteristics of Sulphur. Thus, it shewed itself in reference to the special pains as:

"*a.—Neuralgia.* The nervous pains were, in their mildest degree *shooting;* in their severest, *sharp cutting;* their duration is *short*, often only momentary; they only appear when *at rest*, and especially in the evening, or *early morning hours;* their direction is towards the peripheric ends of the nerves (compare 26 June, 17, 14, 16, and 17 Aug.). The medicine most nearly related to Sulphur in regard to this mode of action, is assuredly Arsenic.

"*b.*—Pains in the *voluntary muscles.* In the mildest form they occur as *tensive* (as if the muscles were too short); in their highest as very painful (tetanic) *contraction* (cramp) of some muscles; they came in the flexor muscles worse when *moving* than when at rest, but especially after violent exercise of the affected flexors (comp. 7, 26, 28, 30 June, and 7 Aug.). I consider Nux vomica to be the nearest ally of Sulphur in this direction.

"*c.*—Pains in the *sero-fibrous membranes* of the joints, and of the osseous system. In their milder form they were *drawing*, in their severer *piercing*, as if numbing the very marrow of the bones, or they were like the feeling that remains after holding a piece of ice long in the hand. They occurred chiefly when at rest (at least, movement has no particular effect on the pains), they *constantly alternate* with one another, now on the same, now on the opposite side of the body, but most frequently with the semi-lateral, frontal, and occipital headache; they occurred at all times of the day, but were worse at night in the warm bed. As nearest allies I consider Mercury, Pulsatilla, and Rhus.

"*d.—Dislocation or strain pain.* This occurs as usual only when some more than commonly violent exercise is taken. It affects the *joints*, especially the *left hip-joint*. Among allied medicines I would only indicate Nux.

"*e.*—Pains in the *external skin.* These have generally the character of *itching, prickling*, &c., and in the highest degree are

burning; as a general rule after scratching they turn into *sore pain.* The burning feeling has this peculiarity, that it is apt to spread over extensive surfaces of the skin; that it most affects the extensor sides, and that by *lying long* on any part, it is either *excited* or *aggravated* (comp. 22, 23, and 24 Aug.). Arsenic is the nearest ally.

"*f.*—Pains in the *head* and *sacro-lumbar region.* The former occurred chiefly in the sinciput, and were generally *semi-lateral,* they were the precursors or followers of the gouty pains in the joints; the latter very often were associated with the occipital pains. They appeared, in every case to depend on sanguineous congestion. Aconite and Nux are the nearest allies.

"Judging from my experiments the left side of the body is that most implicated."

To these observations of Huber's we have only to add, that many new medicinal symptoms have been added by his proving, and the following in Hahnemann's list confirmed: 66, 77, 83, 120, 137, 146, 164, 177, 181, 184, 186, 187, 233, 247, 261, 271, 274, 294, 295, 302, 315, 333, 334, 413, 445, 485, 586, 677, 706, 785, 829, 830, 840, 849, 871, 906, 922, 988, 1100, 1104, 1124, 1205, 1258, 1314, 1363, 1451, 1452, 1483, 1516, 1539, 1550, 1551, 1560, 1568, 1570, 1578, 1596, 1617, 1618, 1624, 1659, 1660, 1662, 1663, 1665, 1875, 1877.

VIII.

Lorenz Köstler, aged 25, proved Sulphur in substance and in tincture.

A.—*Trials with Sulphur in substance.*

Ten powders of Sulphur, each containing 5 grains, which he took in October, 1845, produced no effect.

4th November. Ten grains. Towards evening headache, and shooting in the throat.

5th. Ten grains. Great confusion of the head, difficulty of swallowing; stoppage of the nose; anorexia; feeling of weight in the stomach. In order to get rid of these symptoms, and to move the bowels, which had not acted for several days, he left

off the proving for two days, and took an ounce of salts. This caused several motions, and gave him great relief.

On the 8th, 9th, and 10th, 10 grains. Beyond a feeling of weight in the stomach, no symptoms.

11th. Ten grains. On the right anterior border of the tongue, a hard raised red spot the size of a lentil; on moving the tongue shooting pain in it.

12th. No medicine. The swelling and pains in the tongue were greatly diminished, and the following day were quite gone.

13th. Ten grains. Disagreeable metallic taste; feeling of weight in the stomach; eructations.

14th and 15th. Ten grains. The metallic taste and weight in the stomach as on the 13th, but no more eructations.

Owing to a swelling of the gum and cheek, caused by cutting a wisdom tooth, which lasted some days and returned slightly at a later period, he left off the provings until the 20th December. On that and the following days he took every morning, and on the 24th, 25th, and 26th December every evening, 10 grains of Sulphur, but without any result.

On the 11th, 12th, 14th, 16th, 20th, 21st, 23rd, and 24th of January, 1846, 20 grains were taken.

15th Jan. Occasional eructations and sour taste in the mouth, lasting several days.

20th. Feeling of weight and pressure in the left side of the chest, which increased daily, and was especially annoying on the 26th January. On that day there occurred violent shooting pains, at every attempt to move the chest forwards and to the left, and on taking a breath. On the following days the chest symptoms declined, and gradually went off completely.

B.—*Trials with tincture of Sulphur.*

"For three weeks," says he, "I may have taken, three times daily, 5 globules moistened with tincture of Sulphur, when I experienced a shooting pa[illegible] abdominal parietes, especially in the [illegible] time in the left, at another time in [illegible] lasted a short time, sometim[illegible] the warmth of bed. As I d[illegible]

pains were caused by the Sulphur, I continued to take it. About a week after the first appearance of the shooting pains, there occurred, on the slightest motion, a very troublesome feeling of fatigue. The shooting pains now gradually declined, but in their stead occurred contractive pains, especially in the muscles of the thighs, which often proved a serious obstacle to my walking. In four days these contractive pains were felt deeper, as if in the bones, especially in the femora and right tibia. The head of the right tibia became very painful, and could not bear the slightest touch, and after the slightest movement I had to go and lie down. Now, almost convinced that these symptoms must be the effect of the Sulphur, I intended to leave it off, but as I had a few more globules, I took them all. The consequence of this was, that the pains attained such a degree of intensity as almost to render walking impossible. The very next day, when I took no more globules, the pains became less intense, and in three days were all gone. I have gained the conviction that medicines, even in very small doses, are capable of producing the most violent effects."

K. had a rare sensitiveness for Sulphur, but an equally great repugnance to make himself ill with it. If he had known how to manage with his sensitiveness, he might have furnished us with a rich array of sulphur symptoms. But, unfortunately, this was not the case. On his first trial, when the stomach was somewhat disordered, he spoilt the proving by taking salts. Afterwards, when, after taking 20 grains, he was beginning to have a splendid array of chest symptoms, he suddenly left off the medicine; and his trial with the tincture was only somewhat more successful, because for some time he had no fear of the small globules. In spite of all these drawbacks, however, several new medicinal effects were observed in K.'s proving, and the following of Hahnemann's corroborated: 76, 508, 541, 560, [illegible], 580, 654, 711, 840, 841, 1096, 1192, 1212, 1475, 1480.

IX.

[illegible] aged 23, of sanguine-choleric [illegible] ffered for some weeks in 1845 [illegible] tape-worm. The worm

was expelled by means of a decoction of the bark of pomegranate root.

On the 16th October, 1845, and the following ten days, he took 5 grains of Sulphur without result. Twenty grains which he took on the 27th, 28th, and 30th October, were equally without effect.

1st Nov. At 6 A.M. 20 grains. About 4 P.M. some griping in the bowels, soon followed by a soft, very fetid, evacuation; a disagreeable feeling of pressure in the umbilical region, and, notwithstanding the expulsion of much flatus with the smell of sulphuretted hydrogen, tympanitic distension of the abdomen.

2nd. About 3 A.M. profuse perspiration. At 6 A.M. 20 grains. The same symptoms as yesterday; but they came on in the forenoon, and persisted during the whole day; at the same time violent headache and loss of appetite.

3rd. At 3 A.M. profuse perspiration. At 6 A.M. 20 grains. The same symptoms as yesterday.

4th and 5th. Twenty grains. No morning perspiration; otherwise the same symptoms as the previous days.

12th, 13th, 14th, 15th, 16th, 20th, 21st. 30 grains. The motions were more liquid, and occurred twice a-day; otherwise the same symptoms as on the 2nd instant.

22nd. Thirty grains. Besides the above symptoms, soft, small, quick pulse, 160 beats in the minute; the disagreeable pressure in the umbilical region went off, but in its stead, there came a troublesome pressure in the left hypochondriac region, about 3 A.M., which went off when he got out of bed; in the evening palpitation of the heart.

23rd and 24th. The same dose. The pulse on these days was less quick; the palpitation occurred not only in the evening, but also after dinner, but did not last long; otherwise the same symptoms as the day previous.

25th. Thirty grains. The pressure in the left hypochonder disappeared, but came in a still greater degree in the gastric region. About 3 P.M., for an hour, remarkable dilatation of the pupils; in other respects the same symptoms as on the previous days.

26th and 27th. The same dose and the same symptoms, with the exception of the dilated pupils.

28th, 29th, and 30th Nov., and 1st Dec. No medicine. The flatulent symptoms decreased; the stool as copious as before; the pulse normal.

2nd. Thirty grains. The flatulent symptoms recurred to an excessive extent; the motions were more fluid; the pressive pain in the gastric region went off, but affected the umbilical region; the pulse more rapid; no palpitation.

From the 3rd to the 11th inclusive, 30 grains. The same symptoms as on the 2nd.

No more medicine was taken up to the 12th December. On this and the following four days, the same symptoms as before. On the 16th they declined, and by the 20th they were nearly all gone.

This prover had the greatest wish to make himself ill with Sulphur, but he did not succeed, as he had little susceptibility for the medicine. He had only disturbances of the alimentary canal, and, as the febrile action and palpitation shewed, in the vascular system. He corroborates the following of Hahnemann's symptoms: 586, 650, 651, 710, 769, 785, 829, 871, 897, 1230, 1957.

X.

Dr. Jacob Landesmann made four trials with Sulphur.

I.—*With the fourth dilution* (1-99).

Frem the 17th to the 30th September, 1845, he took daily 10 drops.

18th. A small vesicle appeared in the middle of the lower lip, which dried up after a few days.

29th. In the morning he blew some blood-streaked mucus from the nose. Along with some flatus several drops of diarrhœic fæces were involuntarily discharged. During the day 2 watery stools with slight pinching in the bowels.

30th. About 10 P M. some shoots in the left palm.

II.—*With the first trituration* (5-95).

the 1st to the 17th October, he took 10 grains daily.
eased secretion of urine, and diminished consistence

of the fæces, no symptoms until the 14th, when a small painless vesicle appeared on each frontal protuberance, which remained there for several weeks.

III.—*With Sulphur in substance.*

From the 17th to the 24th October he took daily 5 grains of Sulphur rubbed up with sugar; from the 25th to the 28th daily 10 grains; and from the 29th October to the 2nd November daily 20 grains.

On the 18th October, on awaking in the morning, feeling of roughness in the throat, and shooting pains on swallowing. These symptoms disappeared completely by the next day.

20th. A very violent catarrh came on, which lasted an unusually long time, viz., until the 20th November.

From 11th November to 15th December he took daily 30 grains of pure Sulphur.

13th November. Very soft stool and emission of much flatus smelling of rotten eggs.

14th. Same symptoms as yesterday.

15th. On the lip, near the right commissure of the mouth, there appeared a group of small painful vesicles standing close together.

16th. The vesicles burst, and left behind them an equal number of small round spots, which, the following day, assumed a lardaceous ulcerated appearance; on the 18th they began to dry up, and were covered with a scab, which fell off in five days.

19th. In the forenoon some sharp shoots in the right side of the chest. Excessively irritable disposition without cause. Short dry cough in fits, frequently recurring.

20th. At night he awoke with violent shooting pains in the lower third of the left shoulder blade, much aggravated by movement, but also so violent when quite quiet that he could not sleep all night.

21st. In the morning these pains extended further upwards, towards the upper part of the scapula, whence they spread to the muscles of the nape and the left ear, and were worst when m[illegible] or turning the [illegible] less violent than in

the night, and not so distinctly shooting, more drawing and tearing; they diminished gradually during the day, so that he thought he had quite lost them. But in this he was mistaken; for at night, in the warmth of the bed, they returned with renewed violence. At last he fell asleep, but on account of the pains he passed a very restless night. He had never before experienced anything similar.

22nd. In the morning, one hour after getting up, the pain in the left shoulder declined, and gave but little annoyance during the day. There arose several small, painful elevations on different parts of the forehead and vertex; one, especially, on the skin between the occiput and right mastoid process, was particularly sensitive, and, along with the other elevations, lasted several days, when they gradually went off. About 7 P.M. drawing in the right spermatic chord and testicle. After lying down slight drawing in the right ear, and fine drawing shooting in the left side of the occiput—they were but slight indications of pains, only noticeable because such had never been felt before. The pain in the left shoulder continued in a slight degree, but did not much disturb the night's rest.

23rd. No new symptoms.

24th. After dinner again a slight indication of the pain in the right side of the chest, which occurred on the 19th; afterwards a slight feeling of pain in the centre of the external aspect of the right thigh. At night, after going to bed a very troublesome dry cough, which lasted uninterruptedly nearly a quarter of an hour, whereby one or two lumps of albuminous looking blue mucus were expectorated.

25th. He observed a semilunar furrow, about a line in breadth, which extended right across both thumb nails, near their roots. The nail, both before and behind this furrow, formed elevations. From 6 to 8 P.M. shooting pains in the left tonsil, which, on swallowing, extended into the left ear, and at the same time (lasting till 9 P.M.) violent stitches, recurring every ten or fifteen minutes, through the whole length of the joint of the right index finger, at the extremity of which an cartilaginous wart had existed for several years.

In the morning, in bed, he experienced the pain in the

left scapula, but less violent than before, and nearer the joint; it lasted all day, and ceased towards the evening. The pain in the last joint of the right forefinger also returned, but was not so severe to-day. During his proving of Sulphur he had frequently felt a cold sensation in the left upper arm, but never so distinctly as to-day. At noon dry cough, which lasted a quarter of an hour. The flatus occasionally expelled had a penetrating rotten-egg smell. The stool was very soft and was preceded by griping in the bowels. In the evening drawing pain through the first joint of the left forefinger.

27th—Frequent sneezing, discharge of fluid mucus from the left nostril; a very severe catarrh, although that which dated from the 20th October had only quite ceased a few days previously. At noon an attack of cough as yesterday. In the afternoon slight tearing pains in the left eyebrow.

28th. In the morning, itching, causing him to scratch, on the outside of the left elbow, where there are a large and several small pimples. In the evening frequent tearing in the first joint of the left thumb; after going to bed very annoying itching on the inside of the left knee, where also are several small pimples, which, however, like those on the elbow, went off by the following day.

29th. He observed, on the nail of the left little finger, furrows similar to those on the thumb nails.

30th. No new symptoms.

In the night, from the 1st to 2nd December, such violent itching on the thighs and legs that he scratched till the blood came.

2nd December. In the evening frequent sudden tearing in the left cheek, in the right nape muscles, and in the right tibia. At night again very violent itching in the legs.

3rd. In the morning slight tearing in the second joint of the left little finger. Roughness of both cheeks, heat and burning in them, and sensation as if they had been exposed for several days to a severe cold; this lasted several days, and was followed by a bran-like desquamation, which also lasted several days. In the afternoon occasional return of the griping in the bowels, and in the evening a soft stool.

4th. Colicky gripings in the abdomen, which lasted all day and all night, caused restless sleep, and only ceased the following morning after a thin pappy motion. Betwixt the ring and middle fingers of the left hand a small itching vesicle appeared.

5th. The vesicle betwixt the fingers is larger, but only itches when touched. After dinner pretty severe tearing in the left pectoralis major, lasting five minutes, aggravated by pressure. In the nape on the left side, superiorly, a small painful pimple appears.

6th. In the evening severe itching in the left whisker; after scratching, soreness of the part. Long of falling asleep; starting in a fright on dropping off to sleep; waking at 3 A.M. with aching in the œsophagus, great flow of saliva into the mouth, and clammy taste (as from indigestion), although he had only taken a light supper with appetite.

7th. In the morning the gastric symptoms were gone. The mucus brought away on blowing the nose has streaks of blood in it. The vesicle betwixt the fingers has attained the size of a pin's head, is filled with a clear fluid, and has exactly the appearance of a fully developed *itch vesicle.*

8th. No change.

9th. In the evening tearing in the left upper arm. During the night the vesicle between the fingers burst.

10th. In the evening tearing in the right cheek.

11th. Repeated flying tearing in both cheeks.

12th, 13th, 14th, and 15th. With the exception of being later in falling asleep (often not until 1 or 2 A.M.), and violent itching in the thighs and legs at night, no symptoms.

16th. A hard, red, painful pimple formed near the angle of the left lower jaw, and several itching pimples on the outside of the left elbow, which, together with that on the jaw, lasted several days before disappearing.

18th. In the forenoon tearing pain on the inside of the phalanx of the left little finger, increased by pressure. The itching on the legs, in bed at night, and the late falling asleep, continue.

21st. At night, in bed, tearing under the nail of the left thumb.

22nd and 23rd. Throughout the day feels quite well, but each evening for some hours continued colicky pains and increased flow of urine.

24th. In the afternoon, tearing in the left tibia, and in the evening drawing in the left eyebrow. On two spots of the vertex there are formed very tender, scabby elevations the size of a pea, which last several days.

25th. At night he had very vivid anxious dreams, as if he was pursued by wild beasts.

26th. A hard pimple the size of a lentil formed at the angle of the left lower jaw, and persisted until the 1st January, 1846.

The furrows on both thumb nails, and on the nails of the left little finger, which appeared in November, gradually filled up, and were pushed forward by the growth of the nail, so that after three or four cuttings of the nails no trace of them remained.

During the months of January, February, and March, 1846, the symptoms produced by the sulphur taken became gradually weaker and rarer. They mostly consisted of occasional flying pains in some of the finger joints and other parts of the body, but especially of pimples and scabby eruptions, which appeared here and there. Thus on the 10th of February a furuncular pimple appeared on the left temple, and several small ones on the right mastoid process, which lasted until the 18th February. On the 16th February there appeared a painful scabby spot on the skin, covering the left parietal bone, which disappeared in the course of a few days in order to make way for a similar scabby spot.

The consistence of the stools was remarkably diminished during the whole time of proving, and the flow of urine increased. The sexual power was weakened all the time of the proving, and for long afterwards. The difficulty of falling asleep lasted some weeks after leaving off the sulphur.

IV.—*With the tincture of Sulphur.*

From the 1st to the 11th June, 1846, inclusive, he took every morning, about 11 o'clock, 10 drops; from the 12th to the 21st inclusive, daily, 20 drops; from the 22nd to the 27th in-

clusive, daily, 30 drops; from the 28th to the 9th July inclusive, daily, 40 drops; from the 10th to the 19th inclusive, daily, 50 drops; from the 20 to the 29th inclusive, daily, 70 drops; and from the 30th to the middle of August, daily, 100 drops.

Besides frequent sneezing, and the sensation as if a cold were coming on, and frequent blowing from the nose of mucus mixed with blood (almost every morning); no symptoms until the

15th June. In the afternoon a peculiar pain occupying a space the size of a crown piece, at first slight, but gradually growing more and more severe. It was situated about two inches below the lower angle of the left scapula, and its character was long, pulsative, undulating stitches, which always caused a jerk through the whole body, and compelled him to hold his breath (as when straining at stool). These stitches recurred at intervals of from a quarter to half an hour, during which time the spot alluded to was sensitive to touch, movement, and deep inspiration, but did not actually give pain. These conditions, however, had no influence on the shooting pain, which always lasted a few minutes. The pain lasted all night, and as it was even felt in sleep, it is manifest that that could not be very tranquil.

16th. The pains continued in all their intensity of yesterday. He felt best when lying on the left side. This posture he endeavoured as much as possible to retain during the night, and by carefully avoiding turning in bed, as the pains were thereby immediately aggravated, he passed a pretty good night. Besides the shooting pain, he was troubled by another symptom, viz.—in the evening a dry cough came on, excited by a tickling in the throat, and lasted a whole hour.

17th. In the evening the pain in the back was more violent than on the previous day. He was often forced to leave off speaking because the pain took away his breath. This he could stand no longer, so he took Bryonia, whereupon the pain declined in a few hours, and by the evening was all gone.

18th. On the middle of the lower lip there appeared two small white transparent vesicles, which increased in size the following day, when they had the appearance of herpes labialis,

and on the 20th began to dry up; but in their place there appeared a number of similar but smaller vesicles on the left side of the lower jaw, which also disappeared in a few days.

23rd. He observed on the first joint of the right ring finger a scabious itchy vesicle, which without increasing in size lasted several days before it dried up. A similar but somewhat larger scabious itching vesicle appeared on the 27th, between the left thumb and forefinger.

28th. In the evening he perceived on the inside of the upper lip, near the right commissure of the mouth, a small painless elevation, which in a few days changed into a small pedunculated wart with three free apices. It still remained months after the termination of the proving.

From that day forward, notwithstanding the increasing doses of sulphur taken, no new symptoms appeared.

The reproach so often cast upon homœopaths, that their medicinal provings furnish almost exclusively subjective symptoms, is not applicable to Landesmann's proving; on the contrary, it is rich in objective phenomena—witness the symptoms of the skin, and the fæcal and urinary evacuations.

He confirmed the following symptoms in Hahnemann's list: 41, 217, 385, 394, 410, 413, 541, 552, 593, 830, 869, 871, 896, 897, 953, 1007, 1015, 1081, 1085, 1086. 1087, 1091, 1100, 1135, 1201, 1206, 1226, 1309, 1317, 1359, 1377, 1417, 1420, 1421, 1422, 1431, 1504, 1508, 1509, 1516, 1530, 1535, 1663, 1664, 1791, 1792, 1811, 1874.

XI.

Dr. Mayerhofer, of Munich, made two series of provings with Sulphur; one with triturations, the other with the pure substance.

FIRST SERIES OF PROVINGS.

1st Trituration of Sulphur (10 to 90.)

On the 28th November, 1845, about 9 A.M., he took a grain of this preparation. Soon afterwards strong taste of Sulphur in the mouth, burning in the point of the tongue, confusion of the head and aching in the forehead, constrictive pain in the

pit of the stomach and feeling of sickness, wandering pressing pain in the left hypochondria, chilly feeling, extending from the lumbar vertebræ to the abdomen and extremities.

29th. In the morning violent shooting pains came on in the right hip joint, which compelled him to keep his bed, as he could not raise himself up nor move without the greatest effort. This very troublesome shooting pain extended through the right half of the pelvis down the right femur, avoided the knee, and reappeared as severely in the foot.

30th. The pain abated, he could again freely move the right hip and ankle joints, and stand erect; the tenderness of the joints, however, persisted, now more, now less, for eight days longer. During this time the bowels were very sluggish, and some days not at all moved.

9th December. About 10 A.M., he took another grain. In 20 minutes heaviness and confusion of the sinciput, and aching, squeezing, anxious feeling in the pit of the stomach, which gradually changed into a constrictive and alternately a burning pain. Two hours afterwards there came on a sensation of fulness of the chest, at first an insipid and clammy, but suddenly a sweetish taste in the mouth, sensitiveness of the uvula, tickling in the throat, spitting of a watery slimy fluid mixed with bright red blood several times, at short intervals. (He had had something similar six or seven years previously.) Salivary secretion increased; for a long time he had every now and then traces of blood in the saliva. Conjointly with these symptoms there was a feeling of fulness and distension of the belly, and bearing down towards the colon. Appetite diminished. After dinner the symptoms in the pit of the stomach declined, but the abdominal parieties became sensitive, and the bearing down towards the colon increased. There ensued a loose motion; the pulse was quick, hard, and full.

10th. About 9 A.M., and 9 P.M., one grain. The feeling of oppression in the pit of the stomach less troublesome to-day; in the bones of the arms and legs he had a feeling of weight, general weariness, and discomfort of the whole body. Confusion in the sinciput, insipid taste, appetite small. Constant bearing down in the rectum, and a loose stool. In the evening,

immediately after taking the medicine, sweet taste in the palate. Contrary to the usual habit he was long of falling asleep, and when at last sleep came, it was disturbed by dreams of fire and death.

11th. In the morning, on awaking, sensation of dryness in the mouth, dry wrinkled lips; taste clammy, tongue thickly furred with a dirty yellow coating; aching feeling of weight in the region of the stomach worse than yesterday; great bearing down and feeling of fulness in the rectum; he had not his usual motion of the bowels in the morning. Confusion of the sinciput; annoying sensation of fulness in the abdomen, which was followed by occasional tension and shooting pains. About 10 P.M. he took 2 grains. At night vivid anxious dreams, frequent waking, and difficulty of falling asleep again.

12th. In the morning dryness of lips, the mucous membrane of which lies in folds, aridity of the commissures of the mouth, which are covered with small whitish scales; the borders of the alæ nasi dry, the Schneiderian mucous membrane irritated as if a coryza were coming on, the canthi of the eyes red and inflamed, slightly adhesive, and exuding a little. Along with these, confusion of the sinciput, oppressed feeling on the chest, tenderness of the abdominal parieties, and bearing down towards the rectum. After getting up and passing a hard stool, all the symptoms diminished, so that during the day he felt pretty well. At 10 P.M. 10 grains. At night vivid amorous dreams.

13th. About 9 A.M. 2 grains. Frequent sudden call to make water; increased flow of dark coloured urine; constant bearing down towards the anus, and feeling of fulness in the umbilical region. Towards evening troublesome itching in the scrotum.

14th. About 11 A.M. 3 grains. Sweetish taste, rush of water into the mouth, frequent eructation and yawning, fluent coryza, confusion of sinciput, aching boring pains in the temples and ears, especially the right ear, drawing tensive pains in the right side of the lower jaw, with painful tension and commencing swelling of the right sub-maxillary gland, feeling of fulness of the belly, bearing down towards the anus, clammy taste, little appetite, rigor extending from the lumbar vertebræ over the limbs, and at the same time feeling of distension and bursting

of the abdomen. Throughout the day, itching in the scrotum. About 4 P.M. the rigor recurred, and this time was accompanied by painful shoots in the urethra, and aching boring pains in the bones of the forearm. In the evening, dull aching and feeling of weight in both eyeballs, with loss of vision as if a thick veil were before the eyes. Late in the evening, roughness, redness and itching of the skin on the dorsum of the right hand; some red, very itching pimples on the skin of the right thumb and its dorsal aspect towards the metacarpus; roughness of the skin between the right thumb and forefinger, worse in the heat of bed. The night's rest was disturbed by boring tearing pain in the teeth, which lasted all the following day, and in the night of the 15th attained such a height, that he could not sleep a wink, in consequence of which he got the tooth, which was somewhat carious, drawn the following day.

He discontinued taking the medicine for some days. During this time the exanthematic phenomena on the right hand continued, and were regularly aggravated by the heat of the bed; the pimples gradually assumed the form of small pustules. The fæcal evacuations were far from normal, and sometimes ceased altogether; the fæcal matter was sometimes firm, sometimes relaxed.

20th. About 10 A.M. 3 grains. Confusion and aching in the sinciput, as if a band were tightly tied round the forehead, itching in the scrotum and ineffectual straining at stool, with dull shooting aching pains about the navel. Towards evening several small reddish pustules in the skin of the right thumb, near the metacarpus, which itched excessively.

21st. About 9 A.M. after repeating the dose of yesterday, the following symptoms occurred. Violent fluent coryza, hard stool (about noon), frequent urination, the urine the colour of sherry wine. In the afternoon, itching, burning, and redness of the edges of the lids and of the skin on the outside of the nose. Towards evening great tenderness around the anus, and sudden, jerking, very painful stitches, first out of the right and then out of the left half of the anus. They were so violent that they made him start up from his seat; at the same time chilly

feeling in the legs. In the evening, in bed, itching and burning on the dorsum of the right hand, which became covered with elevated, red, and itching pustules, which went off during the night. (The swelling of the right sub-maxillary gland, which commenced on the 14th, increased somewhat in size to-day, and feels moderately hard and tense.)

22nd. Itching betwixt the fingers of both hands; inefficient call to stool; urinary secretion increased, urine of bright yellow colour. Towards evening a red rough round place, an inch in circumference, appeared near the union of the ring and little finger, on which reddish pustules appeared, which itched very much in the heat of the bed. About 11 P.M. 4 grains. Soon afterwards confusion in the forehead and temples, and aching in the pit of the stomach. Sleep disturbed by vivid dreams.

23rd. About 8 A.M. 4 grains, and about 10 P.M. 6 grains. In the morning, after much straining and effort, a motion, at first hard and afterwards loose. The appetite was diminished, and after taking but a small quantity of food he had the feeling as if the stomach was overloaded. Urine of a bright colour was passed in considerable quantity. Feeling of weight in the humerus. In the evening, after taking the medicine, sweetish taste in the mouth, great flow of saliva mixt with blood, confusion of the sinciput when lying, contractive pain in the forehead and temples, aching and oppression in the pit of the stomach, very heavy sleep, disturbed by dreams, from which he awoke after three hours with the following symptoms: confusion and weight of the head, clammy taste in the mouth, fulness of belly, tension and drawing round in a circle about the navel, feeling of coldness and irritation in the rectum, urgent but ineffectual call to stool; after passing much flatus of the smell of rotten eggs, and a great flow of water, these symptoms diminished.

24th. In the morning, heaviness, confusion and dulness of the sinciput, clammy taste, thickly furred tongue, urgent but ineffectual call to stool, with drawing and tension down the muscles of the loins, discha[illegible] much flatus with the smell of rotten eggs. These s[illegible] the bowels re-curr[illegible]s, namely [illegible]

annoying itching in the scrotum, and on the back of the hands, with tickling, itching, and sore feeling at the outer border of the anus. The swelling of the sub-maxillary gland decreased. At night vivid dreams and uncommon sexual excitement.

25th. The exanthematic phenomena on the dorsa of both hands declined; the irritated state, itching and redness of the scrotum persisted in the same intensity. After dinner a hard stool, followed by sore feeling at the anus. Night's rest disturbed by many vivid dreams.

26th. In the morning, ineffectual urging at stool; severe fluent coryza. The swelling of the sub-maxillary gland grew less. At 10 P.M. 6 grains. Many vivid dreams, causing a restless night.

27th. About 9 A.M. 8 grains. In an hour, anxious aching in the pit of the stomach, confusion of the sinciput, sweet taste, great flow of saliva into the mouth, bloody streaks in the saliva. In 3 hours, rigor over the whole abdomen, feeling of fulness in the body, bearing down towards the anus, jerking stitches through the right half of the anus, itching in the anus, feeling as if the anus were sore, swollen and moist. In the afternoon, anxiety in the chest, difficulty of breathing, cough accompanied by shooting pains in the chest, increased secretion of saliva mixed with streaks of blood in the mouth. In the evening, after much straining, a firm motion, accompanied by rigor proceeding from the lumbar vertebræ, and cold feeling in the limbs, especially the lower ones; violent itching and tickling in the point of the nose, which is red. About 10 P.M. 8 grains. At night many dreams, hence restless sleep and frequent awaking, each time with the feeling of weight and dulness in the sinciput.

28th. About 9 A.M. 8 grains. In the forenoon, after much effort, a hard stool; tongue furred; appetite diminished; throughout the day squeezing pressure in the pit of the stomach, and in the chest. In the evening troublesome itching in the skin of the nose, which is almost all slightly red, but particularly at the tip. At night many vivid lascivious dreams; [illegible]equent emission of urine—the urine the colour of sherry.

[illegible]th. Without medicine. In the morning feeling of weari[illegible]nd heaviness in the legs; confusion of the head. At [illegible]roing, jerking stitches out at the anus, which was then

so sensitive that he could not remain an instant seated. With every stitch at the same time dull shooting and jerking pains in the right inguinal region. Sore feeling at the anus, and escape of moisture from it; itching in the skin surrounding the anus; distension of the belly, in spite of a great discharge of flatus smelling of rotten eggs; annoying but ineffectual urging to stool. At night, after much effort, an unsatisfactory motion with frequent and increased emission of urine.

30th. About 8 A.M. 10 grains. In the forenoon feeling of constriction of the chest, and severe aching in the pit of the stomach; confusion of the sinciput; diminished appetite; sweet taste; copious secretion of saliva mixed with streaks of blood; contractive pains about the navel, troublesome and ineffectual urging to stool. The pustules on the back of the hand decreased in size, but the itching continued violently, especially in the warmth of bed.

31st. The swelling of the sub-maxillary gland quite gone; the sinciput confused; the itching in the scrotum very troublesome; the exanthematic symptoms on the back of the hands diminished; evacuation after great effort.

1st January, 1846. Itching and sore feeling at the border of the anus. In the afternoon itching and smarting in the bend of the elbow, where, in the evening, several pimples on a red spot appeared.

2nd. Same symptoms.

3rd. In the evening 12 grains. In a quarter of an hour feeling of pressure and weight in the pit of the stomach, and difficulty of breathing; dull aching in the forehead; tension in the belly, especially in the umbilical region. At night itching here and there, but especially on the scrotum. Many vivid dreams; restless sleep.

4th. In the morning he awoke unusually early with confused head; feeling of weight in the pit of the stomach; and very great itching on the scrotum and the inside of the thighs. Afterwards there occurred tensive pains about the navel; urging to stool, and after much effort, an insufficient hard motion. The urine, which was in larger quantity than usual, was the colour of light sherry, and its specific gravity was 1019. Appetite diminished; he ate rather from habit than from necessity.

After eating, disagreeable feeling of weight in the gastric region; recurrence of the urging to stool, and after much straining a soft formed evacuation. The urine, discharged in greater quantity in the evening, had the color of white wine, and a specific gravity of 1015. Whilst urinating, and for a quarter of an hour afterwads, rigor, which extended from the lumbar vertebræ over the abdomen. At night great itching on the dorsum of the right hand, especially on the little finger, where he found, the following morning, a pustule with its head scratched off, which had a great resemblance to an itch pustule.

5th. In the morning there appeared on the left ala nasi, towards the cheek, a small distinctly pulsating swelling. Towards noon there appeared, below the left commissure of the mouth, several itching pimples, and on the anterior surface of the left thigh, several itching pustules like scabies.

6th. In the morning 12 grains. Soon afterwards feeling of pressure in the pit of the stomach; frequent yawning and eructation of air. Towards noon a peculiar feeling of trembling and throbbing in the chest and pit of the stomach; bearing down towards the anus, itching shoots in the anus; fluent coryza; feeling of weight in the right arm. The skin was reddened on several places, and itched. The urine passed after eating, in small quantity, had the colour of dark sherry, and a specific gravity of 1026. In the afternoon drawing tensive pain in the right hip, extending down the thigh. In the evening several very itchy pimples and red spots appeared on the thighs; the pimples beneath the left commissure of the mouth were gone, the small pulsating tumour on the ala nasi burst and discharged pus; the pustules on the little finger and on the left thigh dried up. At night many disturbing dreams; waking about midnight and remaining a long time awake.

7th. In the morning bearing down towards the anus and call to stool, but ineffectual, as nothing but flatus came away. It was only towards noon that after much straining a formed soft motion was passed. In the evening tensive drawing pain thigh, bearing down towards the anus. At night g at the anus, and the following morning escape hing fluid from the anus.

He now left off taking the medicine until the 13th. During this time, sometimes one sometimes another of the above-described symptoms occurred, more or less severely, but the cutaneous symptoms were most observed. The symptoms connected with the anus declined after a couple of days, but the motions continued to be very irregular. The fluent coryza, which annoyed the prover more or less during the whole of his proving, disappeared.

13th. In the evening 18 grains. Soon afterwards, confusion in the sinciput; contraction and pressing in the forehead; and aching in the pit of the stomach. At night many disturbing dreams, and frequent waking with pains round the navel; aching in the humeri.

14th. In the morning dryness and tension of the skin of the lips; clammy taste; empty feeling in the head; bearing down towards the anus and urging to stool; after the greatest straining there passed a scanty, soft, formed stool. Towards noon the abdomen was swollen and distended; bearing down towards the anus again occurred, and after much effort another loose stool. Appetite diminished; itching on the dorsa of the hands worse, but the pimples smaller. About 6 P.M. the abdomen was distended, and a disagreeable feeling of fulness about the anus was experienced. The fluent coryza again appeared, and along with it confusion of the head, aching in the forehead, and oppession of the chest. About 8 P.M. great flow of sweetish saliva into the mouth; tickling in the [illegible], immediately followed by the discharge of bright [illegible] blood, to the extent of about half a [illegible], [illegible] proportionately large quantity of sulph[illegible]

"I must observe," says [illegible] my proving of Sulphur, I hav[illegible] ness of vision, and very often [illegible] in the eyeballs. When reading [illegible] mist were before the eyes. I [illegible] with the hand, slightly press and [illegible] to read. Moreover I must hold [illegible] siderable distance from the eyes, [illegible] cannot distinguish the letters. I [illegible]

slight diminution of my visual powers, but since proving the Sulphur, the feeling of weight and aching in the eyes and the weakness of sight rapidly increased, and to a great extent."

16th. Morning and evening 20 grains. In an hour dulness and confusion of the sinciput; in the frontal bone a painful aching, which extended across the nasal bones and both malar bones; feeling of fulness and tension in the abdomen. At noon the appetite was very poor, and after eating there was a troublesome feeling of fulness in the stomach, and aching in the scrobiculus cordis. Soon afterwards violent bearing down towards the anus, discharge of much flatus, and at length, after much effort, a hard motion. In the evening itching behind the right ear, where several scattered pimples had formed. Somewhat later, not only did all the symptoms return which had troubled him before and after dinner, but in addition the following appeared: anxious feeling in the chest, he can hardly expand it during inspiration; itching in the right concha; boring pains in the meatus auditorius externus, copious secretion of ear wax. The night's rest was disturbed by vivid lascivious dreams, causing two seminal emissions, and by the following symptoms: after midnight he awoke in a fright, caused by a dream, and felt aching drawing pains in both humeri, tensive and cutting pains round about the navel, and very urgent but ineffectual call to stool.

17th. The same symptoms as yesterday. In the morning the urine, which was passed in considerable quantity, had a dark sherry wine colour, and a specific gravity of 1008.

18th. In the forenoon, when standing, jerking stitches in the [illegible]; little appetite; during the day two soft formed stools.

[illegible] painful drawing in the muscles of the right thigh, so [illegible] scarcely raise the leg or move it about. In the [illegible] two soft formed stools.

S[illegible]OND SERIES.

[illegible] *Substance.*

[illegible], in the evening, 2 grains.
[illegible]ns; frequent awaking with

disagreeable itching on several parts of the skin, causing him to scratch; and drawing tearing pains in the metatarsus and toes of the right foot.

20th. In the morning, after awaking, vacant confused sinciput, and bruised feeling of the whole body, especially the arms. During the day three soft formed evacuations after great effort. The urine was of a light sherry colour, and its specific gravity 1015. In the evening 4 grains. Restless dreamy sleep; frequent awaking with cutting pains about the navel, and distended abdomen.

21st. In the morning 4, in the evening 6 grains. In the morning, on awaking, vacant confusion of the head; dryness of tongue and palate; arid, wrinkled lips; tension of the skin surrounding the mouth; clammy taste; aching and full feeling in the scrobiculus and gastric region; bruised feeling and heaviness of the limbs. At noon but little appetite, he ate more from habit than necessity. During the day aching in the pit of the stomach; heaviness and tension in the humeri; feeling of soreness of the anus, and exudation from it of a viscid, slimy fluid, which probably occasioned the feeling of soreness. In the evening, soon after taking the medicine, dulness and confusion of the sinciput; aching in the forehead. It was long before he fell asleep, at length he did so, but in an hour he woke up again, and was unable to fall asleep again before 4 A.M. During this time dull aching and boring in the frontal bone, and constant desire to stretch out the limbs.

22nd. In the morning, after awaking from his short sleep, which had been disturbed by confused dreams, bruised feeling in the limbs; vacancy and confusion of the sinciput; painful aching in the frontal bone, and boring pains in the right supra-orbital ridge. The lips were dry and shrivelled; the tongue thickly furred; the taste clammy, insipid; the palate dry. After getting up, cutting about the navel; discharge of much flatus; and, after much effort, a soft, formed, insufficient stool. In the evening 6 grains. Soon afterwards a recurrence of the discharge of flatus, and very troublesome but ineffectual call to stool. Night's rest disturbed by many dreams.

23rd. Without medicine. The same symptoms as yesterday.

24th. In the morning 8 grains. In the forenoon horripilation, extending from the spine over the abdomen, the back, and the upper extremities; and, at the same time, an uncomfortable feeling of weight in the whole chest, and in the bones of both arms. At noon little appetite, and no desire to drink water while eating, which he was always in the habit of doing. During the day two soft formed stools. About 7 P.M. a recurrence of the horripilation as in the forenoon.

As he felt now too much affected by the Sulphur, he left it off for three days. "My complexion," he writes, "shewed a remarkable change, it had a dirty earthy appearance; and since taking the Sulphur in substance, the sexual power is remarkably diminished."

27th. In the morning 10, in the evening 12 grains. During the forenoon heaviness and aching in the pit of the stomach. At noon no appetite. Towards evening severe aching in the frontal bones; weight and full feeling in the chest, and shortness of breath. In the evening, after taking the medicine, vacancy of the sinciput; aching in the frontal bones and pit of stomach. When lying in bed, rigor, proceeding from the right side of the lumbar vertebræ and spreading over the right side of the body. At night restless, dreamful sleep.

28th. In the morning, after waking, vacant confusion of the sinciput, very troublesome feeling of out pressing, bursting and boring in the frontal and cheek bones; dryness and tension of the outer skin round about the lips, and bran-like desquamation of it; dryness of the lips and palate; dryness and burning of the tongue, which was covered with a dirty whitish yellow fur; aching and weight in the scrobiculus cordis; tension and swelling of the belly; cutting pain around the navel, worse on stooping; discharge of much flatus with the smell of rotten eggs: violent but ineffectual call to stool; the borders of the anus were somewhat swollen, and he felt a tickling there as if a worm were creeping about; escape of a small quantity of slimy fluid from the anus. In the limbs, especially the upper ones, a bruised and heavy feeling, which lasted all day. Towards noon, after a painful effort, there occurred a scanty motion; the fæces were firm and of a blackish brown colour,

In the evening 14 grains. Soon afterwards the same symptoms as yesterday. About midnight he awoke, and could not fall asleep again for a long time. During this time he experienced a great amount of the pains in the frontal and malar bones, and in the limbs.

29th. Without medicine. In the morning call to stool, and only after a great effort an insufficient evacuation of a dark hard mass. The night's rest was disturbed by vivid dreams, frequent waking and lying long awake, with great restlessness and excitement.

30th. Morning and evening 16 grains. In the morning a motion of the bowels after much straining; in the forenoon confusion and aching in the sinciput; aching in the pit of the stomach and in the stomach; difficult breathing; increased heat of hands, and increased itching on their backs, which, especially the right thumb, are covered with red irregularly shaped pimples. On the inside of the nose, especially on the alæ nasi, great itching and feeling as if the nose were swelled. Near the outer canthus of the left eye an intensely red, excessively itching and burning spot on the skin; the left palpebral conjunctiva much reddened. Feeling of fulness and tension in the abdomen; bearing down towards the anus, and excessive tickling there. Towards evening the aching in the pit of the stomach returned in a greater degree than in the forenoon; breathing very difficult. Again call to stool, and with great effort evacuation of hard dark coloured fæces. The right submaxillary gland was again swollen and sensitive to touch, and thus it remained for two days. In the evening, after taking the medicine, the same symptoms as on the two previous days. At night voluptuous dreams and seminal emission.

"Since the eleven days," writes M., "during which I have taken the sulphur in substance, my system seems to be thoroughly penetrated with it, and I think it right to draw especial notice to the following.

"*a.* The *difficulty and irregularity of the motions*, which may be caused by a peculiar morbid condition of the large gut, and especially of the sphincter ani, shewn by the cutting pains around the navel.

"*b.* The remarkable *diminution of the sexual power*, especially by day.

"*c. The abnormal appearances in the skin.* Before the proving I had generally cold hands, now the hands are often warm, turgid, swollen and disposed to perspire. The power of Sulphur to irritate and disturb the functions of the skin was shown on several parts of the cutaneous surface by abnormal feelings, (itching, burning, &c.,) and formations, (pimples, vesicles, &c.).

"*d.* The boring, aching, bursting pains in the frontal and malar bones, and the aching, heaviness and bruised feeling in the limbs."

From the 31st January to the 11th February inclusive, he purposely abstained from taking any more medicine. In two days the pains in the frontal bone and the restlessness at night with vivid dreams were gone. The feeling of emptiness and confusion of the head, the pains in the pit of the stomach, and the disorders of the digestion lasted till the 7th February.

The symptoms in the rectum, and the irregularity of the motions remained. On the left upper arm there appeared reddish pimples, similar to those that had previously affected the thighs and the right hand.

12th February. In the morning he again took 4 grains of Sulphur, and the following symptoms appeared: confusion of the head; aching in the frontal bone, aching and feeling of weight in the pit of the stomach. At noon he had an uncommon good appetite; at night very vivid dreams, out of which he often awoke, and could not fall asleep again for a long time.

13th. Without medicine. In the morning confusion of the head; aching in the frontal region; aching in the sternum and oppression of the breath; call to stool, and after much effort a scanty evacuation. At noon uncommonly good appetite; disturbed night's rest as yesterday.

14th. In the morning 4 grains. The same symptoms as on the previous day, and in addition several red itching pimples and spots on the back of the right hand, and several vesicles on the upper lip, which burst and let out an acrid

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yellowish fluid; at the same time tension in the skin round the mouth, which was covered with bran-like scales.

To the history of the symptoms he observed, the prover adds the *examination of his urine*, which gave the following results.

a. *As regards the quantity.*

"In order," writes M., "to decide the question as to the influence of Sulphur in increasing or diminishing the secretion of urine, during the whole time of the proving, from the 20th to the 31st January, 1846, I ate about the same quantity of food every day, and I measured the fluids ingested. The following results were observed.

Periods of 24 hours.	Quantity of fluid taken.	Mumber of emissions of Urine.	Total weight of urine.
From 20 to 21 Jan.	56 oz.	6	50 oz.
„ 21 „ 22 „	52 „	6	32 „
„ 23 „ 24 „	74 „	4	38 „
„ 24 „ 25 „	60 „	6	62 „
„ 27 „ 28 „	52 „	6	37 „
„ 28 „ 29 „	63 „	6	55 „
„ 30 „ 31 „	54 „	9	41 „

"From these observations it appears that whilst I was taking the Sulphur a quantity of urine corresponding pretty well to the food and drink taken was evacuated. It is generally assumed that a healthy man passes 48½ ounces of urine in the 24 hours; but this is an over-hasty assumption, as many circumstances, but especially the quantity of fluid conveyed into the organism, have a great influence on the urinary secretion.

"During my proving of Sulphur my stools had very little fluid or watery constituents. I had never any disposition to perspire, I only do so after any violent bodily exertion, such as very rapid walking; and marked though the action of Sulphur on my skin was, it never produced copious perspiration—hence no fluid could escape out of my body in that way. Only once, on the 23rd January, I perspired profusely in consequence of walking rapidly, and to this circumstance I must ascribe it,

that from the 23rd to the 24th January, although I took 74 ounces of fluid in my food and drink, the urinary secretion was so small, and only 38 ounces were passed. From my observations I conclude, that from the 20th to the 31st January the Sulphur I was proving produced neither an increase nor a diminution of the urinary secretion."

b.—*As regards the physical and chemical properties.*

"On the 22nd December, 1845," proceeds M., "I examined the urine passed in the evening, in regard to its chemical constituents. It had a very pale white wine colour, and almost the appearance of so-called spastic urine; when first passed, and after standing for some time, it was equally pure and clear, and had a specific gravity of 1018, that is, less than the normal.

"It had a marked sour reaction. When heated a slight cloudiness appeared, which, however, went off on adding nitric acid, and hence was not owing to the presence of albumen. The addition of nitric acid caused an immediate deposit of urate of ammonia in fine grains, which, on allowing the urine to stand, appeared in the form of a brownish-red sandy sediment.

"The urine treated with muriatic acid, and allowed to stand, after being well shaken deposited an increased quantity of uric acid. This was precipitated in a reddish sediment, or deposited itself on the inside of the glass cylinder, but it was frequently combined with ammonia.

"Evaporated to the consistence of syrup, then cooled and treated with nitric acid, it shewed a smaller quantity of nitrate of urea than in the normal state.

"After the addition of ammonia, there occurred a copious precipitation of earthy phosphates in increased quantity.

"Acidulated with a few drops of nitric acid, the addition of muriate of baryta shewed the presence of a large quantity of sulphates.

"An equal quantity of urine, acidulated with nitric acid, pre-
nitated the normal quantity of chlorides on the addition of
ate of silver, and the presence of phosphate of soda in large
y was demonstrated by the appearance of a thick greenish
on adding a few drops of ammonia to the filtered fluid,
as neutralized.

Among the fire-resisting salts the sulphates were present in larger quantity.

"The morning urine of the 9th of Jan. was pale sherry colour, clear, without sediment, specific gravity 1021. No change from heat or nitric acid. The uric acid and all the salts increased, only the chlorides normal, the uroxanthine abundant, the urea diminished.

Quantitative Analysis :—

Water	956·3
Solid constituents	43·7
Total	1000

Solid Constituents :—

Urea	18·40	grains
Uric acid	4·00	„
Fire-resisting salts	16·25	„
Extractive matter	5·05	„
Total	43·7	

"The morning urine of the 14th of Jan. had a specific gravity of 1019; the sulphates and the uric acid were very abundant.

"The morning urine of the 15th of Jan. had a specific gravity of 1023, and a great deal of uroxanthine; otherwise quite similar to that of the previous day.

"From the 20th to the 31st of Jan. I made almost daily quantitative and qualitative analysis of the urine. The morning urine was usually of a pale sherry colour, clear, and without sediment; the urine passed after dinner or in the evening was dark sherry colour. The specific gravity on the 20th was 1015, and the following five days 1022. It had generally a strong sour reaction; heat caused no change, except a slight cloudiness on one or two occasions, which must be ascribed to the frequent presence of proteine compounds. No change was caused by adding a few drops of nitric acid; but by adding an [illegible] acid, the urine assumed a brownish violet colour [illegible] of the presence in abundance of uroxanthine. [illegible] rule diminished, the chlorides generally nor-

normal, the earthy phosphates abundant, the sulphates, and the phosphate of soda very copious. The uric acid, which was deposited in great quantity, was combined with ammonia.

"In the urine of the 30th and 31st of Jan. were traces of iron; there can be no doubt that it came from the blood, by a peculiar process of excretion, probably induced by the excess of Sulphur."

To the happy combination of great susceptibility to the action of the medicine, and a most praiseworthy perseverance in its use until a real medicinal disease was produced, which caused the prover much suffering, we owe the above proving, which is not only one of the best ever made by a homœopathic medical man, but in respect of the examinations of the urine is superior to any. The majority of the symptoms observed by Mayerhofer having been present almost uninterruptedly from the beginning to the end demonstrates his steady perseverance. Many of the symptoms were of an objective character, and almost all may lay claim to a high practical value on account of their resemblance to symptoms daily offered to the notice of medical men in their treatment of actual diseases; I refer specially to the symptoms relating to the skin and intestinal canal, particularly its lower end. Many of the symptoms are new, and the others corroborate the following numbers in Hahnemann's list: 76, 132, 141, 145, 151, 229, 234, 257, 292, 312, 341, 353, 356, 357, 376, 392, 395, 404, 417, 420, 428, 454, 485, 493, 494, 495, 498, 506, 512, 513, 550, 557, 586, 603, 628, 653, 654, 706, 710, 711, 719, 785, 786, 790, 813, 819, 830, 848, 852, 855, 856, 860, 862, 871, 922, 923, 927, 928, 933, 938, 946, 947, 953, 955, 996, 1011, 1015, 1020, 1086, 1153, 1168, 1175, 1193, 1361, 1405, 1444, 1452, 1489, 1497, 1574, 1576, 1720, 1740, 1785, 1788, 1816, 1820, 1830, 1834, 1859, 1870, 1879, 1880, 1881, 1882, 1889.

(*To be continued.*)

TABES DORSALIS AS A CONSEQUENCE OF THE ABUSE OF MERCURY.

By H. Blumberg, M.D.

(Read before the Manchester Homœopathic Medico-Chirurgical Society, June 4, 1857.)

Tabes Dorsalis—atrophy of the spinal cord—is a chronic disease consisting of a softening and partial consumption of the spinal cord. In consequence of it, those parts of the human body which possess voluntary muscles and ramifications of spinal nerves, lose the muscular tone and the power of movement.

This disease is in most cases seated in the lumbar portion of the spinal cord. It appears principally in men from 40 years of age and upwards as a consequence of sexual excess. This is generally the only cause alleged by the best authors on the subject, but I will endeavour to shew that the abuse of Mercury is not rarely the source of this terrible disease. In both cases the symptoms are alike. The first symptom is a disposition to be very soon tired, principally in the legs and in the back; then the sensation in these parts becomes imperfect and abnormal; the feet, standing or walking, are stiff, chilly and numbed; the patient has a sensation as if he stood on wool or soft sand, or as if the ground was soft and wavering; his gait is uncertain, and he therefore generally stamps in walking. By and by he loses the power to use the muscles without the help of the eyes; in the dark, or when he [illegible] his eyes, he loses the balance of his body; he becomes giddy [illegible] and falls.

With the [illegible] upon the spinal cord, all vol[illegible] hasty, and awkward; [illegible] stumbling; the patient ca[illegible] when he is walking; an[illegible] his way. At last he [illegible]

The accompany[illegible] ling, itching, burni[illegible]

in the legs and back, across the belly, in the rectum and bladder. Often paralysis of the muscles of the rectum and bladder.

A frequent inclination to make water occurs in the beginning very often, and some drops are discharged involuntarily. Enuresis during sleep is not uncommon, but it generally alternates with ischuria. The urine does not flow in the form of a bow, but more perpendicularly, and the bladder is never totally emptied. Relaxation of the genital organs, impotence, and pollutions, even in the day time, are very frequent. The bowels are almost always constipated; the power of the abdominal muscles is weakened, and the excrements are sometimes involuntarily discharged. There is often a feeling of tightness beginning at the lumbar vertebræ and extending round the abdomen.

Very often amblyopia, deafness, weakness of the memory, melancholy, and imbecility associate themselves with the other symptoms. But this state can continue years and years without causing death, which at last is harbingered by tuberculous consumption.

Let us now compare these symptoms with those produced by Mercury in large doses. In the first place we are struck with the very powerful and deadly effect of this, unhappily too commonly used, drug. Decandolle "Physiologie Végetale" affirms that all plants are soon blighted by the vapour of Quicksilver. Bouchardat states that very small doses (one part of Mercurius corrosivus to 800,000 parts of water) are sufficient to kill fresh-water fish. These facts prove that Mercury is destructive to organisation, and that large quantities of it taken during a long time into the human body must necessarily produce a disorganisation in all, or at least some, of its vital parts.

It will scarcely be doubted that Mercury affects prominently the lower end of the spinal cord, if we consider that the symp- [illegible] of the physiological provings correspond almost exactly [illegible] pathological symptoms of Tabes dorsalis. We find in [illegible] Arzneimittellehre" of Hahnemann, and in Possart's [illegible]m," under the head of Mercury:— [illegible] liness; different abnormal sensa- [illegible] extremities; habitual constipa-

learn, with any certainty, what remedies were used, but I presume that Mercury was the principal one, because, in the first place, it is generally employed by the allopathic practitioners in Macclesfield against rheumatism; and second, because his symptoms grew alarmingly worse after having pursued the treatment for some time. When I saw him first he presented the following state:—

He is numbed and lamed in both legs, he feels giddy on walking; he sees objects double or crossed he has great pain in the lower part of the spine; he is constipated, and aperient medicines have ceased to take any effect upon him. He is very deaf and short of memory; he makes water with great uneasiness, and only a few drops at a time; he is impotent, and has been so four years.

I used, in this case, the same remedies as in the other, but not with the same good effect. Sulphur and Strych. acted the best upon him.

3rd. H. S., silk weaver, aged 43, admitted Feb. 19, 1857 He stated to me as follows: Three years ago he had a kind of rheumatic pain and stiffness in his right shoulder; the surgeon whom he consulted gave him much Calomel—he distinctly remembers that it was calomel—after some weeks he salivated profusely. Some time afterwards he felt very weak, particucularly in the legs; and by and by he became unable to walk straight. He complains of violent pains in the lower part of the back; an abnormal sensation in his legs; feeling as if bound tightly with an iron belt across the abdomen. He is very weak-sighted, and sees often black spots; very slow reaction of the iris to light; nearly continual discharge of semen; habitual constipation and ischuria; impotence for three years. I began his treatment also with Sulphur, once a day; and used consecutively nearly the same medicines as in the other cases, with the addition of Cannabis. Again I found Sulphur and Strych. 30 of great value. The patient is at present much im-
[illegible] the discharge of semen has ceased; he walks much
ch less pain in his back and legs.
t in none of these cases was *any* trace of
the urine.

I will now conclude with a brief resumé of my observations.

1st. Tabes dorsalis is sometimes the consequence of the abuse of Mercury.

2nd. It is necessary, therefore, in every case of Tabes to inquire as much as possible into the previous treatment.

3rd. The prognosis in all such cases is very bad.

4th. An improvement can, nevertheless, be effected by using Sulphur in the first place, and Strych. as a principal remedy.

ON HIPPOZÆNINE,

By Dr. Wilkinson.

Under the names of *glanderine* and *farcine*, Dr. Wilkinson calls attention to the employment of the matter from glandered horses, first introduced to the homœopathic world by Herr Lux, in 1833, in his [illegible] work called the *Isopathy of Contagions*. But few [illegible] homœopathic literature of the employ[illegible] and these few are of very doubtful value. [illegible] names of Glanderine [illegible] will attain a greater pop[illegible] writes rather as [illegible] results from th[illegible] well groun[illegible] as hitherto [illegible] ease has disapp[illegible] ployed them. [illegible] the subject for se[illegible] and we could only h[illegible] medicines had been fo[illegible] on a theoretical idea of [illegible]

The employment of [illegible] dom, and from the produ[illegible] mated by Vaccination; to [illegible]

* See his paper on the [illegible]

as practised on a large scale in many capitals of Europe. It is my duty, in a very brief form, to bring to the notice of all who are interested in the science of healing, in public health, and in the eradication of incurable maladies, the employment which I have now made for some time of the morbid products of glanders and farcy, in the extinction of certain human diseases. It would be easy to write a book upon the subject; but it is more profitable in a new field, requiring the co-operation of many minds and experiences, to confine it to a short memoir.

Glanders, the malignant catarrh of the horse, and farcy, which is tertiary glanders, affecting the lymphatics and cellular tissues of the limbs and of the whole body, are diseases so deadly, that until of late years, the problem of the harmless administration of their virus was not likely to be solved. At present, however, by the simplest process, the means is at hand whereby any person can prepare these substances for himself, so that they shall preserve all their medicinal vigor, though they lose entirely the power of morbid inoculation.*

In bronchitis, in all its stages, I have had considerable experience with the employment of Glanderine; and I could easily detail cases from my note-books, if I had not proposed to myself limits of space which do not admit of such details. Suffice it to say, that I regard Glanderine as little short of a specific, in the worst forms of bronchitis; especially in elderly persons, where suffocation from excessive secretion is imminent; in such [illegible] the patients themselves express the relief experienced as [illegible]ical." Here Glanderine appears to supply a desideratum. [illegible]tion is rapid and satisfactory in those neglected cases [illegible] smouldered perhaps for weeks in the bronchial flues [illegible]titioner is called in; and when he arrives, the [illegible] perchance for the first time takes to his bed, [illegible] end. Let Glanderine be employed under

[illegible]oculation of syphilis cures syphilis, why should [illegible] from another horse, cure glanders? The ex- [illegible]ase could at least do no harm. Or let it [illegible]ed. The first or second decimal [illegible]ion, with the certainty that that [illegible] mitigated disease.

these circumstances, and the expectoration becomes freer; the fever less intense; strength recovers itself: in twenty-four hours the expectoration diminishes; the diminution of the sputa proceeds rapidly, and the strength advances with it: the mouth moistens and the tongue cleans; and the patient is soon out of danger.

From my present experience of Glanderine, I look back upon many fatal cases, which would probably have been saved by this surprising remedy.

There is another class of bronchial cases in which Glanderine is attended with success: I mean those in which there is no present danger; but in which the disease has firmly established itself in the lungs, perhaps extensively, and requires many weeks to subdue; with a great probability that a bronchial asthma will be left behind. In these cases, Glanderine will perform, in eight or ten days, the work of weeks of any other medicament, or course of medicaments, with which I am acquainted. It is my practice, where necessary, to alternate it with any other remedy, as aconite, ipecacuanha, or bryonia, which seems to be necessary, every two, three, or four hours.

In pneumonia I have not tried Glanderine; but I shall do so with great confidence, especia[illegible] the rusty sputa are strongly characteristic. I do [illegible] may be its effects in dry coughs; but in the m[illegible] of cough attended with expe[illegible] and whi[illegible] to commence at [illegible] and [illegible] been decisive, and [illegible] It has speedily abate[illegible]

There appe[illegible] Glanderine is not app[illegible] and fatiguing cough [illegible] slow; and where [illegible] In such cases, Gland[illegible] the rapidity of its [illegible] accord, cease to take [illegible] cannot be continued in [illegible] the benefit of the next [illegible] cedence of the Glanderine.

stop here and give nothing else, the Glanderine would go on acting, and conduct the case to a successful result.

In catarrh, as in bronchitis, and especially where the symptoms are grievous, and the nose inflamed with thick and tinged defluxion, where the tonsils are swollen and the fauces gorged, you will be surprised by the rapidly specific action of Glanderine. If the nose and mouth are ulcerated, so much the better for the energy of its characteristic action.

In terrible cases of scarlatina, where the odour of the breath is putrid, and the buccal passages are filled with tenacious lymph and mucus, while the swollen tonsils close the posterior channels, this remedy alone, from its wonderful promptitude, seems capable of rescuing the patient. I have tried it in none such; but that it would not disappoint experiment, is a fair deduction from what it *can* do. Recently, it saved a little patient apparently suffocating from diphtherite in the mouth and nose, and agonised with buccal ulcerations; in twelve hours the morbid secretion had ceased, and disappeared; the superficial ulcerations had vanished; and none of these symptoms reappeared.

It has been tried in putrid fever with the most marked and rapid success: indeed, I should say that putrescence, destructive or quasi-malignant ulceration, and tendency to decomposition of the tissues, are among prime indications for its employment. It is well worth a trial in carbuncle and plague.

I have given it in one case of ozæna with marked success: and should constantly rely upon it in malignant erysipelas, particularly if attended with large formations of pus, and destruc- of parts. In malignant pustule, which nearly resembles se that inoculated glanders produces in the human believe it would be specific. In pyema, and inflam- veins and lymphatics, particularly where matter is ing, Farcine would no doubt prove homœopathic, the symp oms.

olent o apid cases, I would recommend the cine, as recent as possible.

ations, I have used a lotion pre- pellet of Glanderine in half a dy thus in old bad legs, and

in putrid bed sores. It also deserves experiment in obstinate syphilitic sores attended with great fœtor; it will probably abate the malignancy of the inflammation, even if it cannot, from specific causes, work a deeper effect.

It is a fair deduction also, that Glanderine is a first-class remedy in confluent small pox, or it might be given in alternation with Farcine.

I have made no trials of it in skin-diseases; but shall assuredly do so wherever malignancy and phagedæna are prominent characteristics. It is promising in pustular ringworm.

I have cured one case of anasarca of the lower limbs with Farcine. This remedy, judging by the analogous effects in the horse, will probably apply with efficacy to uterine phlebitis. It is worth thinking of also in psoas and lumbar abscess.

Let the veterinarian try it in the lung disease, and murrain, of cattle.

A most interesting problem occurs: What will Glanderine do for phthisis? I can only answer that in my experience, it has stormed the outworks of phthisis; but whether it will carry the citadel remains to be proved. It diminishes the expectoration; abates the constantly recurring aggravations of inflammation; and checks the liability to catarrhal affections, which excite the tuberculous diathesis from without; but whether or no it will operate upon tubercle, I cannot say. In time, it is my intention to lay this matter in detail before the world; but at present a sufficient time has not elapsed to test the trueness of the remedy. Meanwhile I commit the experiment also to all humane persons, and institutions for the consumptive. The Glanderine can be given in alternate doses with iron, or other remedies: being an animal substance, it will be singularly little interfered with by other drugs, provided three, four, or six hours intervene between the administration of the two substances.

The use of Glanders suggests also the use of all the other animal poisons. These indeed may be regarded as malignant or medicinal growths upon the fields of morbid animal nature, corresponding to the nefarious plants, aconites, upases, deadly nightshades, which grow [illegible] n the soil. We shall have to enter this field; for the [illegible] of the [illegible] shows the

energy with which they will work for us when they are duly broken in. I shall now conclude by showing how safely all these poisons may be employed; and that they may be at the disposal not merely of the few, but of every one who will take the care and trouble of preparing them. For the cost of a few shillings, a whole county may receive the benefit of these remedies for a twelvemonth; and any humane person, medical, clerical, or common, may have the Christian privilege of dispensing them.

The following theory has sketched itself out for me relative to the action of Glanders, which, to save words, I state affirmatively.

This poison is actively centrifugal, and tends to abolish the centres of vitality by powerful ejection of their minutest contents: the spaces being filled up with matter, the result of malignant or destructive inflammation. It is the type of vital destructions; and begins its ravages in the nose of the horse, because that is the spot where it can most easily explode its first seeds of disease: it wants space for throwing off and sowing its poison. It is good in all malignant ulceration and excessive expectoration. And its general curative indication is, wherever extrusion of contents overbalances supply of nutrition. It is the opposite to *arsenic*, which corrodes by stopping function, and isolating parts; this over-energises, explodes, and scatters the grains of living organisms.

Farcy is the same thing in parts where expulsion cannot go on; in which case destruction and retention of the destroyed parts have place. The lymphatic system is attacked, because it is the nutrient or supplying system, and it is affected by reaction. Glanders is the direct action; Farcy the inverse.

Now to obviate the objection of danger, as well as to disseminate and laicize the remedy, I will state the mode of preparation; premising that I have taken Glanderine myself for obstinate catarrh, and with only beneficial results.

By the aid of an experienced Veterinary Surgeon (I have enjoyed the invaluable kindness in this respect of Professor Spooner, Principal of the Veterinary College), procure in small one-drachm bottles the matter from the nose, and from the lungs, of infected horses immediately after their destruction. The Glan-

derine from the nose and from the lungs, and the Farcine, should be of course in *separate* bottles. And each medicament, for we will no longer call them poisons, should be prepared separately. Let us now follow the nose Glanderine as a model for the rest through the various stages of its preparation.

Put on a pair of kid gloves.

Weigh ten grains of the Glanderine in glass scales: weigh in the same, ninety grains of thick gum mucilage. Rub the two together for twenty minutes, or until the amalgamation is complete. Then for the second time weigh ten grains of the new mixture; and throw away the rest. Let the mortar be carefully rinsed with large quantities of water at a sink where there is a ready outflow; and take heed to your eyes, or to any sore or cut surfaces, while you are engaged with the first dilutions of the Glanderine. Rinse lastly with boiling water, and cool the mortar again at the tap. Observing this caution, now rub the second ten grains with another ninety grains of thick mucilage; and of this mixture preserve one fluid drachm, throwing away the rest; and rinsing the mortar again with the same care. Now take your measured drachm of the second dilution of Glanderine, and in a two-ounce bottle, pour upon it nine drachms of distilled water. Cork the bottle, and put on the cork the figure 3, signifying the third dilution. Shake the bottle until its contents are thoroughly mixed. Into another two-ounce bottle now put one measured drachm of n. 3, and nine drachms of distilled water. Mark this n. 4, and shake it into admixture as before. Throw away the remaining nine drachms of n. 3. Then prepare n. 5, by a similar process to n. 4, and throw away the residue of n. 4. Perform all these operations neatly and gently, and mind your eyes in the meantime.

Now this is what you are to do with n. 5. Take an ounce of it *by weight*, and [illegible] the [illegible] powdered gum arabic; mix them [illegible] the fluid is taken up, and the mass [illegible] this mass is your stock of harmless [illegible] By carrying the process wi[illegible] you are of course make what [illegible] *always* made use of [illegible]

brethren will probably enrich experience by the employment of the 200th.

Well, you have got your mass; and now all you have to do, is, to make it into small pills. I make up two grains into a pill. The whole mass should be pillulated at once; and the pilules received into a flat box with plenty of *sugar of milk* at the bottom; and freely moved about many times for a few days to prevent them from sticking together. The medicine is now hermetically enclosed in the gum, and will preserve its virtues for months; perhaps for years.

How safe is its administration! The sixth attenuation contains in one grain but one millionth of a grain of the Glanderine, and this millionth is extended through a million fold its own space. My habit is to dissolve one of these pilules in half a tumblerful of water; and to direct a teaspoonful to be taken every four or every six hours. Thus again the dilution and extension are multiplied twenty-fold. Or in round numbers, each teaspoonful contains the twenty millionth of a grain, one thousand million times extended. The tumbler ought to be kept in a cool place, because the water easily ferments in warm weather.

So much for dilution of virus: now for experience of safety. I have on many occasions applied the contents of the tumbler to raw surfaces; have thrown it up the nose in ozæna; and given it in aphthæ and buccal ulcerations; and with only beneficial results.

Glanderine is not a pleasant idea: but neither is Vaccine: the healing use has however another idea concealed within it; and with this use alone the name of Glanderine will soon be associated.

HYGIENE IN RELATION TO PRIVATE BOARDING SCHOOLS.

By George Wyld, M.D.,

of the Committee on Sanitary Science at the Society of Arts.

omparable Nicholas Nickleby history is said to have o a speedy bankruptcy many a "Dotheboys Hall," and,

The subject of this paper has been lately brought before my notice by the occurrence of three cases in illustration.

In the first case, I was requested by the parents to pay a friendly visit to the school where their son was boarded. In this instance, I found about sixty boarders, from the age of 14 to 18, and I found the proprietor an energetic disciplinarian, and apparently a good-hearted man. The dormitories were clean, light, and airy—the situation of the school in a north-country town, was most bracing and salubrious, and the surrounding country, from the existence of extensive dry common land, was admirably situated for a large school; but, on enquiry, I found that the boys were seldom permitted to play on the common! and that no other animal food than beef was ever seen at table—one day roast beef, another day boiled beef, hot and cold alternately. This beef was supplied by contract, and certainly was not A 1 in quality, although a fair quality. Now with regard to this beef, beef, beef foundation on which the above-mentioned sixty boys were being built, surely it required no great depth of knowledge to be convinced that this heavy monotony must, in a few weeks, to say nothing of months and years, have produced its, perhaps desired, effect, viz. an amount of temperance, the result of that nausea which must have thus been at least as advantageous to the proprietor's purse as disadvantageous to the muscular system of the boys.

During my inspection of this school, I asked the proprietor if he had any method whatever of controlling in any way a certain practice almost universal among boys. In reply, he gave me to understand that he was quite ignorant of the mere existence of any such practice. Whether this ignorance was affected or not, t equally, in my mind, rendered the individual alluded to, a most unfit person to superintend an extensive boarding school of boys.

With reference to this subject, perhaps, with relation to the aining of boys, more difficult than any other to deal with, I ust observe that I cannot but believe that the experience of medical men would suggest an open straightforward course in v that over delicacy which may permit the boy's moral and physical clearness and other than a false modesty.

The second case I allude to was that of a boy who was boarded at a healthy sea-side establishment; but, in this case, instead of his dinner being always beef, it was *always* mutton. From whatever motive this endless routine of mutton was given it matters not, but the practice was not the less pernicious. Nature is infinite in her variety; the charm of variety is a proverb. Yet here we have Dominies presuming to rear God's creatures, but from gross ignorance or selfishness setting God's laws at defiance.

The boy alluded to had much psoriasis on different parts of his body, and he informed me that whenever any of the boys were a little ailing, they were sent to an old servant in the establishment, who from a large black bottle gave such invalids a purgative dose! this female Esculapian, no doubt, being, if not a learned, at least a faithful adherent to the school of the humoral pathology.

The third case I allude to, is that of a boy about 16 years of age, whose skin was also much infested with psoriasis. At this school, the practice was to allow only *ten* minutes for breakfast, and *ten* minutes for tea. The consequence of this was, that the boys bolted their food with all the haste possible, but were yet seldom able to satisfy their appetites.

The school alluded to was situated in the garden of England. It was not a Squeers school, and yet the master was surely a pernicious blockhead.

Schoolmasters should be the best and the wisest of men, but are they not too often the most conceited and ignorant of the community?

There must surely be in broad England many first-rate private boarding-schools for young boys, but so far as my information extends, I have never heard of one *model* establishment. They are almost invariable [illegible] boarding-schools, that is, establishments wh[illegible] chief difference being, that on[illegible] school expensive and ari[illegible]

The following [illegible] school ought to be in a [illegible]

1. If the school [illegible]

possible, be in an open, not over-wooded, well-drained part of the country. If there be a large common in the immediate neighbourhood, it will be an immense advantage, as much of the common land of England has a dry sandy foundation, and affords an admirable opportunity for all kinds of boyish sports, and often in winter as well as summer. If the situation be also high there will, for most boys, be a double advantage; but boys having any tendency to scrofula or consumption, should generally be sent to such sea-side places as are well-drained, and where there is no muddy harbour. Many boys of a relaxed habit will be much benefited by being boarded especially in the south or east of Scotland (not in the west), or in the upland parts of Yorkshire. While boys with sensitive constitutions, and especially if there be any respiratory tenderness, should rather be sent either to sea-side places, or the south of England. A supply of good water should be an important consideration in fixing on a site.

2. No establishment is fit for the reception of a large number of boarders which is not well ventilated, and I confess there is much difficulty here, as no builder ever appears to give himself any concern whatever about the ventilation of his houses; and yet if there is one subject more important than another with reference to the preservation of the health, especially of the young, it is ventilation.

In the Dublin Lying-in Hospital, before that institution was ventilated, of 7650 children born in a given time, 2944 died within fourteen days of their birth; but, on a method of ventilation being carried out, the deaths at once fell to about one-third of the above proportion. That man, therefore, whether he be a schoolmaster or a physician, who overlooks the importance of this question, must often be guilty of homicide.

If, in an apartment, there be a fire at the base of any flue, and an Arnott ventilator leading from near the roof into this flue, the ventilation in this apartment will be more or less satisfactory; but, in summer, when fires are not lighted, an use. In such cases, I believe the ntilation is to lead one or more g, and carry these pipes into

a larger general pipe, which should terminate in the *kitchen* flue; because the kitchen fire being in operation *summer* and winter, and the flue being always hotter than the surrounding atmosphere, and therefore containing rarer and ascending air, it is obvious that it must act as a continual suction pump, day and night, summer and winter.

An apparatus such as I describe could be fitted up, I believe, for about £30, in a house capable of boarding sixty boys; and I estimate the necessary duct or ducts leading from a room as a multiple of the aggregate wind-pipes of the boys present, *e. g.* for sixty boys a pipe with a diameter of about 6 inches, would be required. In dormitories, if a small pipe could be, as above, led from that part of the ceiling over each bed, the advantage would be great; and if the method were applied especially to any small chamber set apart for the reception of cases of infectious or other diseases, the advantage would be greater still. The above method is based on a process carried out by Mr. Fleming, a Glasgow Surgeon, in 1831, in a large "*land*" of houses, called the Barracks, occupied by about 500 low Irish, and which contrivance was the means apparently of almost exterminating typhus from that building.

3. With regard to diet, it requires no profound knowledge of organic chemistry to teach what a boy should "eat, drink, and avoid," the only rule being to give that simple diet which is agreeable to the appetite, provided experience does not prove that any given appetite is a false criterion.

At a large school *much* variety may be inconvenient, and it is not necessary. Sirloin of beef roasted, boiled round of beef, roasted leg of mutton, boiled ditto; occasionally, but not often, soup and bouilli; harico; hashed beef and mutton, carefully cooked; very rarely veal, and occasionally lamb and Irish stew, the staple being roast and boiled beef or mutton. This list will afford ample variety in meats, so far as health is concerned.

No dinner should be without some plain pudding, unless there be fish or soup as well as meat, in which case pudding should not as a rule be given. The most wholesome puddings are ordinary rice or bread puddings, properly seasoned, made with or without eggs, but with good milk; fruit puddings in

season; stewed fruit and rice; and even occasionally simple plum pudding. Bread and potatoes should accompany each dinner, and frequently also cabbage or french beans.

Breakfast should consist of the best cocoa, with good milk, and a little white sugar. Some boys may not be able to take cocoa, but if in health, and the cocoa be really good, it is one of the most wholesome of beverages. Linnæus called it *theobroma*, or food for the gods. With this "divine beverage" should also be given the best bread, white or brown, at the option of the boys, and the best butter, with occasionally treacle (an excellent mild aperient) for those who wish it.

Black tea and coffee, alternate weeks or months, both being much diluted with the best milk, should be given at tea time, with bread and butter.

Supper, I think, may be generally dispensed with, although there are cases when some bread and butter, or biscuit, may be necessary.

With regard to beer, I do not think it is very essential, and still less so if the water of the district be good; but when given it should be home-brewed, if possible, drawn from the barrel, and more rich in hops than in malt; the quantity allowed should rarely exceed one half-pint, and that at dinner or supper time, at the option of the boy.

A really good cook is very essential; no boy can enjoy ill cooked food, and without cheerfulness at meals, food is more or less poisonous.

The best hours for meals for boys are, I think, 8, ½ past 1, and 7.

And for bed from 10 at night to 7 in the morning in winter, and 6 in summer.

I should propose to divide the day as follows:—Up at six, and expend one half hour in dressing and washing, shower and hip baths, or if possible, a swimming bath being provided. 7 to 8, prayers, and a little quiet reading, or strolling about; breakfast and repose, or moderate exercise, from 8 to 9. Schooling from 9 to 12; from 12 to 1, play. 1 to half-past 1, to wash hands and face, each boy to brush his own shoes, if dirty, and comb his hair, and rest; and then from half-past 1 to half-past 2, to dine, and rest after it. From half-past 2 to half-past 4,

schooling; from half-past 4 to quarter to 7, play; rest and prepare for tea from 7 to half-past 7; after 7 until quarter to 10, when there should be again prayers, should be spent in out or in door amusements and easy preparation for to-morrow's schooling; but any over-tasking of the brain near bed-time must be especially avoided. I thus give 8 hours for bed, 5 or 6 hours for schooling, and 10 hours for dressing, eating, recreation, and play.

The choice of games may be left much to the option of the boys; but fencing and single-stick as an elegant and healthful recreation, should be taught by a competent master, who should also, to some extent, control excessive physical action; also dancing; and, if possible, no boy should be permitted to leave school who has not been taught swimming.

As an exercise for the lungs, vocal music should be taught, and also reading aloud and recitation.

When learning lessons, the desk on which the books are placed should be so high as to prevent all stooping, and further, at bed time, the dumb bell movements, with or without instruments, should be gone through nightly, in order to expand the chest and thus freshen the body before lying down to rest.

No boy should be permitted to sit in the house with wet clothes or shoes.

Light and open clothing about the neck should be encouraged, and thin flannel under-shirts should be worn summer and winter.*

I have said that if beer be given it should be *home* brewed; and with regard to household works, I am decidedly of opinion that the boys should be taught such works, and should understand how to make blacking, brew beer, brush shoes, bake bread, sweep floors, polish tables, boil potatoes, roast or stew meat, paint wood-work, and learn the use of tools, roast and make coffee, and keep household accounts, curry horses, &c. A knowledge of such arts possessed by our aristocracy, may—as the history of the Crimean war inversely teaches us—save a nation from the brink of ruin. But beyond their educational

* Hahnemann and others have disapproved of flannel being worn next the skin, considering it an irritant and an over "caudling"; but the writer would, on the other hand, adduce the testimony of Dr. Combe, the experience of the army and navy, and the instinctive predilection of cricketers.

value, such arts are, at least to all mechanical minds, as interludes to book-work, refreshing, and therefore salutary. "In all labour there is profit," the meanest work becomes noble if done with a serious purpose; and the most interesting episode in the life of Peter the Great, was his having learned ship-building as a common carpenter at Chatham. I understand that every boy in Prussia, from the Crown Prince downwards, learns some trade, and it would be well for the youth of Britain, in a hygienic, as well as in a philosophic point of view, if they were taught, besides a smattering of Greek and Latin, the creative powers of practical mechanics.

The boy should be trained so as to become a gentleman, a Christian, and a man. A smattering of Greek, Latin and algebra may not be altogether useless in after life, while the learning of such is at least a severe task, if not a good discipline, but, in a *physical* world, it is not an easy thing to be truly a MAN, unless there be a good foundation of well-built brain, bone and muscle; and towards the laying of this foundation it appears to me that neither the best workmen nor the best methods are usually employed, at either the public or private boarding-schools in this country. Private enterprise may be too limited to admit of a model establishment, but public enterprise could not embark in a nobler scheme, than that, by which, through obedience to the physiological laws of the Creator, the noble youth of this great country might ultimately comprehend and practically solve the grand question of, "*What is a man, and what ought he to do?*"

REVIEWS.

Further Remarks on Homœopathic Hospitals; being a second sequel to the "Edinburgh Essay" on Homœopathy, by W. F. GAIRDNER, M.D., Lecturer on Practice of Medicine, Edinburgh.

DR. GAIRDNER again! we think we hear our readers exclaim, what has he to say now? Not much, truly, and that chiefly apologetic.

"I should not," he says, "have been again tempted into print, had I not felt that it was due to my readers to correct and apologize for an error,"—the error being one we commented on in our last, where the number of "catarrhs, including bronchitis, coughs, &c.," treated during a certain period in Fleischmann's Hospital was said by Dr. Gairdner to be 118, whereas the real number as we shewed was 443. Dr. Gairdner confesses now that his cypher was incorrect, and that ours is the correct number. He calls his mistake a mere "clerical error," and accounts for it by acknowledging that he copied his statistics from his own "unanswered because unanswerable" article in the *Medical Times*, in place of consulting the original. As it was on these false statistics that he founded his coarse and vulgar accusations against Fleischmann in that "unanswerable" article, we put it to Dr. Gairdner's readers if an apology is not due from Dr. Gairdner to Dr. Fleischmann as well as to themselves. As of course we had no means of knowing that Dr. Gairdner had copied his figures from his own falsified statistics in the *Medical Times*, we could not account for the difference between 443 the real number, and 118 the number given by himself, and so in our last number we certainly hinted at the possibility of the false statement being a pure fabrication for the purpose of deception. Dr. Gairdner is highly indignant at this "atrocious insinuation," though he makes no retractation of nor apology for the expressions he hurls at the heads of his opponents on the strength of his own falsified statistics, some of those expressions being, as our readers may recollect "a sham and a fraud," "mendacious documents," "perversions of truth," "delusive statistics." We are now to accept Dr. Gairdner's "mendacious documents," (as he would have called them had they proceeded from our side) as "purely clerical errors," caused by his having copied himself. Should Dr. Gairdner on any future occasion enter the lists against homœopathy, and treat us to a quantity of statistics, we would advise him to give his authority for his figures, and when we find him quoting from himself we shall know what value to attach to the authority, and look out for "clerical errors."

In this singular pamphlet our opponent confesses also to

having now for the first time some of the common works on homœopathy, and he boasts that if he had had them originally he would have done wonders. We scarcely think he could have surpassed the feat he has already performed in the four essays which he has already written on homœopathy, in which he has exposed his own ignorance and presumption in a progressively increasing degree, and in the last he confesses to having made a most egregious blunder. Of course, had this pamphlet been only apologetic and penitent we should have given the author praise for his candour, and been content to shake hands and be friends again. But no, though driven from his former ground he makes a stand at the spot he has been forced to recede to, and begins squaring at us again in as lively a manner as though he had never been thoroughly beaten. Hear him! "I shall not let off my opponents so easily; but shall place them in a far more conclusively ugly situation than they have yet occupied, in the defence of their most indefensible and untruthful documents." However, he need not be alarmed—we are not going to pursue him any further, we have shewn sufficiently that his ammunition is mere blank cartridge which does us no harm but only makes a bad smell. Having driven him off our ground, and effectually exposed the imposition of his attack, we shall leave him to blaze away as much as he likes, he cannot hurt us, and all his blazing can only bring himself into bad odour. Our ancient Pistol has eaten his leek, swearing horribly the while, and now he may utter what "prave 'ords" he likes, we, assuredly, shall not reply to them. It has been said that a man can be written down by nobody but himself, and Dr. Gairdner has written himself down as low as he can well go; "a more conclusively ugly situation" we should not desire to see our worst enemy in, and there we leave him. Such a shuffling, foul-mouthed controversialist as he has shewn himself to be, merits no further notice.

On Artificial Digestion as a Remedy in Dyspepsia, Apepsia, and their Results, by EDWARD BALLARD, M.D., *Licentiate of the Royal College of Physicians and Fellow of the Royal Medical and Chirurgical Society of London, Lecturer on the Practice of Medicine at the School of Medicine adjoining St. George's Hospital, &c.* Second Edition. London, 1857. pp. 46.

AN impaired state of the function of nutrition may, in many cases, be traced to a deficiency in the quantity, or a defect in the quality of the secretion of the gastric glands.

Till recently, the efforts of physicians had been, in such cases, directed towards exciting or correcting, by medicinal agencies, the production of that secretion, the absence or poverty of which was the cause of disease. M. Corvisart, on the other hand, has endeavoured to show, that a more certain and direct method of affording relief is to be found in supplying directly the solvent principle of the defective fluid, as obtained from the fourth stomach of ruminant animals. M. Corvisart's observations on this subject are to be found in his work entitled "*Dyspepsie et Consomption—Usage de la Pepsine,*" *Paris,* 1854. In this country, it has been taken up, investigated and experimented upon by Dr. Ballard, and the results are concisely given in the interesting *brochure* now before us.

Dr. Ballard commences the consideration of the remedial power of artificial digestion, by enunciating a few of the well established doctrines of the physiology of digestion. This is followed by a resumé of the pathology of dyspepsia and apepsia. He then proceeds to show how, by causing digestion to take place artificially, some forms of these affections may be cured. And subsequently he directs our attention to the preparation, the method of using, and to the therapeutic effects of *Pepsine.* He concludes his essay with the recital of twenty cases selected from his own practice, and from the records of foreign medical journals, illustrative of the action of the remedy. It is our intention to give our readers a brief outline of the several points thus brought under our notice; and we trust, that some may be

induced carefully to consider the interesting experiments Dr. Ballard has laid before the profession in his little book.

Nutritive material derived from azotised substances, and supplied to the stomach in a form capable of assimilation, is necessary to maintain the body in health. Alimentary matters must, before they can be made susceptible of assimilation, undergo a change in their chemical and physical characters. M. Corvisart divides food into aliments and nutriments. The former being such substances as are useless for purposes of nutrition prior to digestion; the latter, such as having undergone this process are rendered capable of assimilation. The conversion of aliment into nutriment is partially effected by cooking, but mainly by the action upon it of the gastric juice, the most important constituent of which is an azotised substance, of the nature of a ferment, *Pepsine.* Digestion is effected by the agency of Pepsine, conjoined with an acid, either lactic or hydrochloric. Digestion of an aliment may be effected out of the body by the same means, *viz.* by the admixture of gastric juice, aided by agitation and exposure to an appropriate temperature. Artificial digestion may be similarly accomplished by admixture with water containing Pepsine in solution, and an acid—the lactic, according to Boudault, being the most effective—all the other conditions being imitated. The Pepsine may be obtained either from herbivorous or carnivorous animals.

Dr. Ballard concludes the consideration of these physiological propositions by expressing his surprise, that facts so long well known and understood, should not sooner have suggested the utility of artificial digestion in the cases where it is now proposed to be employed. The history of medicine, however, supplies us with so many instances, where the practical results of purely scientific observations have remained unnoticed for a considerable length of time, but, when seen, have appeared so obviously to follow one another, that we can hardly sympathise with Dr. Ballard in the astonishment he feels, that the feasibility of doing for the stomach, what that organ could not do for itself, should not have been propounded to the medical world till within the last five or six years.

Debility, especially that of old age, and that which accompanies and succeeds severe diseases, anæmia, and structural changes which involve the secreting tissue of the stomach, are the chief pathological conditions to which Dr. B. directs our attention, as those in which gastric digestion is imperfectly carried on from the inadequate secretion of Pepsine. The results of this deficiency are observed in the stomach—the intestines—and also in the appearance of general inanition. In the first, we see the defect of Pepsine indicated by pain, by the chemical alteration of the food taken, and in the vomiting of the food in a partially or wholly undigested state. The evils produced by apepsia in the intestines, are seen chiefly in children. The undigested food passing along the intestinal canal acts as an irritant poison producing, besides vomiting, diarrhœa and colic. Undigested food is frequently recognised in the evacuations. Chronic diarrhœa, too, in children who eat largely but do not thrive, is the consequence in many instances of apepsia. In grown up persons, we see as the direct result of it, flatulency and diarrhœa; and, as an indirect result, we commonly meet with habitual costiveness. Inanition, more or less complete, is an equally formidable result of this deficiency. The failure of gastric secretion is doubtless at the bottom of many instances of progressive chlorosis and prolonged debility.

It is to these various effects of apepsia, that Dr. Ballard considers the method of treatment he proposes to be peculiarly applicable. He also directs [illegible] to its probable utility in cases where [illegible] support nature, while endeavo[illegible] —where to save time [illegible] digestive canal, where [illegible] to the patient, [illegible] aliment as to [illegible] cases of mal-nutri[illegible] where the plan of [illegible] able, are such as [illegible] lation of aliment [illegible] nutriment.

The question next presented to our consideration is, how artificial digestion may be employed as a remedy. The gastric juice of the lower animals may be administered for this purpose. But in this form it is intensely repulsive, and moreover but a small proportion of Pepsine is contained in a large quantity of gastric juice. As it is upon the Pepsine that we must depend for the conversion of the aliment into nutriment, this substance, isolated from the fluid, conveniently answers all the purposes for which it is prescribed. It is prepared in its greatest purity by M. Boudault, of Paris, under the name of "*Poudre Nutrimentive.*" Of this powder there are four kinds. Nos. 1, 2, and 3, are acidulated with lactic acid. No. 4 is neutral, or nearly so. Nos. 2 and 3 are medicated; the former with one-seventh of a grain of hydrochlorate of Morphia to every dose of 15 grains; the latter with one-fourth of a grain of Strychnine in each dose.

The Pepsine of M. Boudault is of a light brown colour, with a slight odour of gastric juice, and a faint acid saline taste. It is readily soluble in water. The preparation used is not chemically pure, the process of rendering it so being followed by the destruction of its physiological properties.

The average dose is 15 grains, a smaller quantity being sufficient for infants.

It may be taken either dry or in solution, the principal point to be attended to being, to take it with, or at the commencement of the meal on which it is to act. No considerable quantity of liquid should precede, or immediately succeed a meal in which Pepsine is used, and alcoholic and hot beverages should be avoided as likely to interfere with the chemical operation of the medicine.

Another class of cases in which Pepsine may, *à priori*, be expected to be of service in aiding nutrition, is that where the use of solid food is urgently required, but where the patient cannot from whatever cause swallow any other than liquids; or [illegible] be supplied *per rectum*. Under such [illegible] version of aliment into nutriment [illegible] se the chances of the successful

Poudre nutrimentive, of an inferior character, and consequently uncertain action, having found its way into the market, Dr. Ballard suggests that the digesting powers of every specimen should be tested before its employment.

In his observations on the therapeutical effects of Pepsine Dr. Ballard states, that its principal influence is exerted on animal or nitrogenised food; though it operates in some degree on that of an amylaceous character, causing the ultimate conversion of such as have been transformed into glucose into lactic acid. It is probably, Dr. Ballard thinks, on this property that the efficacy of rennet in the treatment of diabetes depends.

An increased desire for food is a prominent result of its first few doses. In instances where voracious appetite accompanies prolonged diarrhœa in the apepsia of infancy, the appetite becomes diminished as soon as the general improvement of nutrition becomes marked.

Its beneficial influence is most clearly seen in cases of dyspepsia arising out of defective or imperfect secretion of gastric juice, particularly where pain, vomiting, and flatulent distension succeed the use of animal food. Where digestion is not improved after three or four doses, it may be inferred that some other cause, over and above a defective secretion of gastric juice, gives rise to the dyspepsia. This may be found in some instances in hyperæsthesia, in other instances in atony of the muscular coat of the stomach. In the former case Dr. Ballard prescribes the poudre nutrimentive No. 2, that viz., which contains the hydrochlorate of [illegible]; in the latter he advises the No. 3, in which there is a [illegible] of Strychnine. When both these conditions [illegible] of Pepsine, he mixes the two powders [illegible] the acid is freely formed in the [illegible] of a low quality, he [illegible] cases the dose [illegible] limited to the [illegible] that the action of [illegible] its use is followed by [illegible] gastric glands. Further [illegible] where constipation has [illegible]

follow the employment of this agent. In some instances, their increased action has amounted to diarrhœa, but in none to the extent of inducing debility, and in all it ceased on the suspension of the medicine. We here conclude our analysis of the first part of Dr. Ballard's *brochure;* the remainder of it is taken up with the reports of cases in which Pepsine has been prescribed.

The first case given is one of severe dyspepsia, which had existed for eight months; during which time the patient, a lady 41 years of age, had been under the ordinary treatment. No kind of food could be taken without great distress; a sense of tightness and distension across the lower part of the chest, the epigastrium, and hypochondria followed shortly on a meal, and remained often all night. The pain was always worst after animal food; she had taken purgatives, quinine, iron, and stimulant beverages. After three weeks of purgation Pepsine was given, the dose 15 grains; the first three days the diet consisted of a light boiled batter pudding; after this but little inconvenience was complained of, and what there was did not occur till after the lapse of an hour, and was relieved at once by a draught containing a few drops of lactic acid.

On the fourth day she was able to take the inside of a mutton chop with but little discomfort. A grain of Quevenne's iron was now taken with the Pepsine at each meal, and agreed well, notwithstanding what might have been expected from the previous results of chalybeates, they having always rendered her feverish and produced headache. On the sixth day of taking the Pepsine she was free from all inconvenience after food. On the twelfth day animal food was taken twice a day without causing any uncomfortable sensation, and was followed by great increase of appetite and strength. The Pepsine was continued for five or six months, during which time she increased 6 lbs. [illegible]ight, and health was completely restored.

[illegible] fifth case is one of severe, and protracted dyspepsia, in [illegible] delicate la[illegible] the gastric symptoms being relieved [illegible] milk diet, but returning imme- [illegible] She was ordered 15 grains of [illegible]sisting principally of animal

food. The first day she suffered a little from flatulence; the second not at all. Her strength began to improve immediately, and recovery followed after using the Pepsine for three or four months.

Two cases of infantile diarrhœa are related, the ages of the patients being respectively 9 and 15 months. The dose of Pepsine was 6 grains. In both diarrhœa had existed for some weeks; and in both it was at once checked by the use of Pepsine.

The remaining 11 cases are extracted from the French journals, and in all the action of Pepsine was prompt and efficient. The only unpleasant result being in a few instances the production of diarrhœa, which however ceased with its cause.

From the resumé we have given of Dr. Ballard's little work, it will be at once apparent that Pepsine is one of those substances which, like cod's liver oil, stands on neutral ground. The value of no therapeutic principle can be supposed to be called in question by any practitioner, who uses such an agent as this. It exerts no medicinal influence on any organ of the body. Its sole end and aim is to supply the place of a similar secretion to that which diseased action has rendered wanting. By its use nutrition can be carried on in spite of the disease which causes it to be checked; and while such is the case, the employment of medicines, specific to the tout ensemble of the morbid condition, is likely to be followed by much greater success when it is given with them, in suitable cases, than when its use is omitted. In conclusion, we would simply suggest that our brethren should confine themselves to the use of the *poudre nutrimentive* Nos. 1 and 4, that acidulated with lactic acid, and that which is neutral.

MEDICAL NOVELS.

Doctor Antonio. By the Author of Lorenzo Benoni (G. Ruffini).
Two Years Ago. By C. KINGSLEY.
Fair Oaks. By MAX LYLE.
Lucian Playfair. By J. MACKERN.

The only feature common to these various and very dissimilar

works of fiction is the one which brings them within the limits of our critical jurisdiction. They have each of them a Doctor for the hero of the piece. This is so new an honour for us that it naturally suggests the inquiry of whether there has been any change in the relation of medicine to fiction by which the two have been brought into a state of greater rapprochement than formerly, or whether it is a mere accidental drift upon the hat of the doctor of medicine of that incessant fall of novels which cease not summer or winter to descend upon the earth tending to accumulate about the porches of the church, especially if of mediæval architecture, and to overwhelm gentlemen who ride at sunset with a military air, but which hitherto has been rather dispersed than attracted by the sharp rattle of the doctor's carriage or the canter of the country surgeon's bony nag. To enable us to reply at all satisfactorily to this question, we must consider what the various kinds of fiction are, and we shall then perceive that while some of the multifarious productions will naturally eschew others will as naturally adopt medicine as the appropriate magazine from whence to derive materials "to point a moral or adorn a tale."

Works of fiction may be divided into three orders,—narrative, speculative, and dramatic. The first is the primitive tale or story of which we may take the Oriental fictions, for example, those of the "Arabian Nights," as a perfect type. The interest of this class depends almost solely upon the incidents narrated. The amusement they afford is but one degree removed from a purely sensuous one. In fact in the original manner of its construction and delivery it appeals much more to the senses than to the intellect. The appropriate scene is the shade of a tamarind tree, the time the setting of the sun, or the after glow that suffuses like a bright dream the face of the desert, warmth, stillness, all combining with the influence of the plant that "soothes but not inebriates," to give full effect to the charmed story of what befel "in the golden prime of good Haroun Alraschid." To derive gratification from this requires a degree of passivity on t of the hearer almost approaching sleep, and, in fact, he nself up to the gratification of a waking dream. In ing climate of ours we cannot accumulate all the

accessaries of the Eastern reveller in stories; the nearest approach perhaps is to "lie under a cherry-tree, in a fine day in June, and read Quentin Durward," an occupation which a celebrated divine and orator used to speak of as his greatest conceivable enjoyment.

The act of reading implies a certain amount of effort, and is so far inferior to the passive entrance of the imagery by the ear. However, long practice and the modern perfection of type and paper reduce this once laborious operation to an exceedingly small impediment, so that a person lying on a sofa in a well lighted, well warmed room, with a well printed convenient volume, is in almost as favourable a position for being given up to the purely sensuous enjoyments of a story as if he were in a desert of Arabia. Now let us suppose a novel is ordered for such circumstances, how would the writer who undertook the task set about it? He would naturally say to himself "my object is to give the greatest possible amusement with the smallest conceivable effort on the part of the reader. The reader is like a person lolling at a window watching the passers by, I must give him his procession and contrive that the persons who compose it shall be as picturesque as I can make them. Now if I watch the passengers of any thoroughfare I find my eye is attracted by a few to the exclusion of the others, and most of all by the scarlet uniform of a soldier. While the colour arrests the eye the fancy is at once roused into a pleasing reverie as to the possible adventures of his life. He could tell us of strange scenes of excitement, exactly what my readers want."

The soldier, then, as an adventurer, as a warrior, as a bright figure, attractive to the senses, and above all as representative of the manly in contradistinction to the feminine on the one hand and to the angelic on the other, and for this reason instinctively the favourite of a large class of women, the soldier will be generally selected as the hero of the narrative novel; the doctor never. Because he pe[illegible]onally makes no appeal [illegible] his dress is traditional[illegible] the contrary, o[illegible] *supposed* to do [illegible]

and so far from being of an essentially manly formation, the more he approaches the ideal the more will he recede from the distinctively manly and approach the feminine, or combine in one so far as is possible the masculine and feminine elements. "More compassionate than woman, lordly more than man."—Such a character may be infinitely superior to the military, representing the power of love, while that represents the hero of power, but it will never do for a narrative novel.

The distinctive character of the second order, or speculative novel, is, that the fiction is subordinate to the inculcation of some peculiar notions that the writer wishes to introduce into the public mind. It might be called the didactic instead of the speculative, for it generally aims at teaching, however, we prefer calling it speculative, for it is now so often employed to give currency to novel ideas or speculations. It may be considered as taking the place in modern literature that "the moralities" occupied in the fifteenth and sixteenth centuries. These were plays whose object was to bring before the public some peculiar truth, or what their author regarded as such; they dealt mainly with religious belief, as that was almost the only subject which occupied the popular mind of that period, but they were not exclusively devoted to that, for there is one of the moralities of the time of Henry the 7th written with the view of enforcing upon the people of England the study of philosophy, and in it the discovery of America is referred to. Now that the influence of the stage has been superseded by that of the press, we naturally find the agency of the latter used for similar purposes as the former once so powerfully served; and a large number of modern novels, indeed probably the majority, are the moralities revived. While the special form of the morality-novel must depend on the genius or lack of genius of the writer, the subject will naturally be chosen in accordance with the requirements of the period. At one time it will be religious, if the public mind is interested in any ecclesiastical [illegible] as it was so[illegible]me years ago; at another time it will be [illegible]but at present neither church nor [illegible]nt, on the contrary, had it not [illegible]dia the *Times* was in risk of

perishing of inanition, owing to the extraordinary apathy of the public about its own affairs. There is not at present a single political question which excites even the most moderate enthusiasm in the public mind, at least no question of internal policy. But sailors tell us that there is no time when more work is done than during a run across the Pacific Ocean when, for weeks together, not a sail requires to be touched, for that then the men are all busy in putting the ship and all its tackle into order. So with the ship of state during this profound repose of the political elements, questions of social interest have for the first time risen to command public attention, and Young England has chosen for his motto "education and health."

The consequences of this change are very curious. In the first place it annihilates political parties, for who can possibly deny the importance of either health or education? In the second place it advances into a new position the ministers of health and the body of teachers. This seems to be the reason of the appearance of the doctor as a hero. Had the moralities existed as plays instead of as novels we should have had the president of the College of Physicians on the stage instead of Dr. Luther and his Frau, and he would have lectured his audience upon the folly and criminality of sleeping twelve in a closet and the other abominations that are practised in all our large towns. But we may even go a step farther and observe that not only will medicine in the abstract naturally occupy the attention of this class of novelists, but that the reformed medicine of Hahnemann is specially fitted for the fiction pulpit, because it professes to achieve far more positive good, and therefore is more calculated to stir the imagination; it has the advantage of an affirmative against a negative; it has also the charm of novelty and of popularity, for from its freedom from all the revolting appliances of external torture and disgusting potions, it gives no offence to the most delicate, and might be practised, as indeed it largely is, by the most refined ladies in the land. All these are powerful recommendations to the novelist, and the only reason that a homœopathist has not hitherto figured as he should in fiction is the dread of ridicule so fatal to this class of literature. For unless a novel of the speculative kind is successful it is nothing;

it is a sermon without an audience, and a writer will naturally be keenly alive to ridicule knowing how entirely it would defeat his aim. Now the doctor has of old played a ridiculous part in fiction, and this was the inevitable consequence of his secondary and incongruous position so long as the military hero prevailed. Now that a change is advancing it is a great trial to a novel to convert this traditionary laughing-stock into a hero, and when we add to this inherent difficulty in exalting a doctor, the additional disqualification presented by a doctor who is laughed at by all other doctors and the vast majority of their patients, it is obvious that it would require no ordinary courage, indeed nothing less than great genius or great prestige to write a novel with a homœopathic doctor as its hero, which should command public attention and attract public sympathy, yet the thing must come in the course of nature.

The remaining class, the dramatic, includes all tales of fiction, the interest of which depends upon the representation of character. In many respects this may be considered the highest order, for it implies in the author the possession of true creative faculty and its influence is much more permanent than that of either of the other two. Mere narrative of curious incidents, however cunningly conceived and set forth, cannot exceed in interest the actual narrations of adventurous travellers, and the speculations introduced into a novel, let them be urged with ever so great eloquence, must be antiquated either by their reception or rejection. But the vitality of a well-conceived character endures for all time—even although the type is not the highest. Who has not come under the influence of Defoe while reading the "Adventures of Robinson Crusoe?" At first sight one might suppose that the fascination of this work lay in the incidents it related, but a more careful examination of Defoe's writings, and a comparison of "Robinson Crusoe," with all other books of sea-faring adventure, whether real or fictitious, teach us that it is the intensely human element which pervades the work that gives it so strange an influence, it is because when we read
[illegible]t the time actually converted into so many "Robinson
[illegible]h of us has made his goat-skin coat and shaggy
[illegible]een startled by the print of the cannibal's foot.

The fictionist who possesses this faculty may use it for effecting indirectly the objects aimed at by the two other orders of writers. He may produce a tale of wonders of surpassing interest, or he may make his characters represent his peculiar opinions, speculations or beliefs, or he may use his power of delineation in one particular direction so as to exhibit the vices and follies of his time. He will then be the satirist, and the satirist is the preacher in disguise, and so well disguised is he that one of our most popular and powerful writers of fiction has had to defend himself seriously from the charge of being immoral because all his characters were specimens of selfish, mean, and despicable human beings, whatever might be their social rank! As if it were possible for the mind to conceive of vice as vice without being in possession of the idea of virtue! and as if it were possible to depict meanness so that it gave rise to dislike or indignation in the mind of the beholder without stimulating into active exercise the nobler feelings on which this resentment depends!

For the purposes of this highest class of novels, we consider the materials afforded by medical experience well suited. Either as actor or spectator the Physician might be the central point of a most interesting and instructive fiction. If taken as an actor, he might be accepted as a type of a mind exposed to the most peculiar training, the results of which might be exhibited. He is placed in the most neutral and at the same time the most instructed position of any class of men.* He must know everything and be nothing. He cannot be a politician, for he passes from the bed of the most obstinate obstructive to the chamber of the exhausted radical, and in each he sees only a sick man, for disease is the heir-apparent of the great leveller death, and carries much of its succ[illegible] He cannot be a dogmatic theologian, for h[illegible] one word the dying petitions of a do[illegible] delivered with

* Sir T. Brown says, "I am [illegible] and sympathises with all things [illegible] crasy in any thing. These natio[illegible] behold with prejudice the Fren[illegible] *Medici.*

equal earnestness, and which it would be inhuman to interrupt by question or doubt. He can hardly even be a patriot, for he has to bend over the wounds of his country's foes, and to administer in sympathy all the attention in his power to those he denounces in his litany. In short, the Physician must be human in the largest acceptation of the word, feeling for man as man, for woman as woman, and even for the infant, as an infant. To the psychologist it can hardly fail to be a most interesting problem how far it is possible for a mind to become so general in its sympathies and in its acquisitions without losing for itself a hold of all positive belief. The danger at all times common to medicine, which we might call the art of defeat, where he is best who makes the fewest blunders, is greatly increased at those times in the history of the art when scepticism of its value breaks over it like a flood, as it is now doing. The medical sceptic is well sketched in "Fair Oaks." "Paul did not get on as a doctor. His cast of mind was metaphysical rather than practical; and he was utterly deficient in that steady self-reliant hardihood of speech and action, which the medical man who intends to rise in practice *must* feel or assume. The 'rough and ready' doctor, like the rough and ready soldier, is often the one most distinguished by fortune. Paul Glyn was not such. With his keen and delicate perceptions, he dared not practise the 'hit or miss' system of treatment; he saw too vividly all the remote possible consequences of the slightest error to risk anything willingly; he was not prepared to take many a random shot on the chance of one hitting the mark. And when he failed he could not carry off his failure with due professional imperturbability. Paul certainly was not born to be a doctor! He soon found he could not satisfy either his patients or himself; he had not their confidence, for he had [illegible] own. He became more and more irresolute and self-[illegible]. Each failure prepared the way for others; with [illegible] was i[illegible]vitable, for at each failure his high [illegible]proach bore him down, and para-[illegible] began to dislike a profession [illegible]plexities of judgment, into [illegible] not solve, and suffering he

could not relieve. He began to experience that deep distaste of his circumstances—that weary restlessness, which assails a man who feels himself intellectually superior to his position, while practically, or in the opinion of others, he is unequal to it."

This looks a picture from life. We at once recognize the quiet, unobtrusive, thoughtful, man of learning, who has been elbowed aside by the vulgar, loud, bustling, pushing practitioner, and who, settling in some eddy, watches the stream bearing others towards the prizes of life, of which he is infinitely more worthy than they who rush on, but which he must for ever fail to achieve, because he is deficient in the coarse hempen fibre that bears the jar and tug of the clumsy galley of fortune. The poet complained to Jupiter that he had forgotten to leave a place for him when he portioned the earth among soldiers, lawyers, &c. Jove replied, True, there is no place left for you *there*, so must you come up *here* beside me, that is *your* place. This is Schiller's consolation to minds of the high order of Paul Glyn.

"Fair Oaks" is the only one of the fictions enumerated at the beginning of our article in which the medical mind, as such, is made the subject of scrutiny and speculation. That this analysis displays great penetration is beyond a question. From the extract we have given, our readers can form their own opinion. How far the construction of the plot is well qualified to bring into play the most important elements of the medical mind, supposing that to be the purpose for which the book is written, may be fairly doubted. It seems to have been written by one more experienced in medical failures than in medical success. The hero gives no indication of possessing medical intuition, as special a gift as military intuition—an endowment which enables the born Doctor to appreciate at a glance the realities of a case through all its [illegible] coverings—something wholly different from the [illegible] with which it may [illegible] should be represented [illegible] in great abundance wh[illegible]

There is more of this [illegible] and ready tact in devis[illegible]

in Dr. Turnall, the hero of "Two Years ago," by Mr. Kingsley. There is also a much richer field of incidents invented for the display of this medical faculty.

But Mr. Kingsley in this, as in most of his other novels, uses his characters too manifestly as masks through which to utter his own sentiments. The voice is still the voice of Jacob, however hairy his hands may be. So that, although, with the instinct of genius he has represented a great deal of the ready-handed Doctor in Turnall, yet the character, as a whole, is altogether an unfit representation of the true medical man, and indeed Mr. Kingsley seems quite aware of it, for reserving the prize—a lord's sister—for a long-skirted, young, lily-handed, intoning clergyman, who comes out strong on the high church side and is converted to the opposite by the cholera in the course of a few pages, he marries his medical hero to a mad Methodist teacher,—and it is a very suitable match.

The admirable story of "Dr. Antonio" derives its interest from the excellence of its portraiture of character. The hero is a Doctor, because it suited the purpose of the author to represent him in the variety of situations natural to such a calling at the period and country in which the scene is laid. But he is not a medical hero; he is a chivalrous Italian gentleman who moves with native grace, power, and dignity through a variety of events of domestic and political interest. He is in his nature a genuine hero, but the Doctorship is entirely adventitious. His profession is made subservient first to love, and then to politics.

The same observation is true of "Lucian Playfair." He, too, is put through an immense number of situations, such as only members of the medical profession are likely to be acquainted with, and not many even of them. For example, we have the horrors of the worst of madhouses revealed, and a story which, from its extreme improbability, we presume to be [illegible] of an Irish medical student, who carried his passion for [illegible] affections not beyond but into the grave, and, [illegible] resurrectionist, dug up the body [illegible] sencoffining is accurately de- [illegible] it off for the purpose of a

quiet private dissection, which was unfortunately frustrated by the revival of his victim, and arrival of her brother. This work is an example of what might be produced by a physician, if he were to give an account of his experience of actual life, but to win a large amount of confidence implies such devotion to a profession as for the most part disqualifies from the task of writing fiction, and of course it would be out of the question for one so trusted to violate the sanctities of the medical confessional, and reveal, for the gratification of an idle curiosity, the strange, tragic, or comic incidents which daily come before his notice. His vast experience of naked life may make him a most wise and entertaining companion, but not a novelist. This seems to be perceived by the lynx-eye of our most popular of living writers. The part which "Physician" plays in Little Dorrit as contradistinguished from "Bar," and the mercantile hero of the piece is eminently characteristic.

"Fair Oaks" is the only one of our list which we can regard as a medical novel in the sense of dramatising the Physician's vocation; and this novel, although written with great beauty of expression, is interesting and instructive chiefly for the stray thoughts which lie embedded in its texture, rich in suggestiveness; and from the piquancy of its satire, than from the specific merits we demand in a work devoted to the representation of the art of healing. Its exposure of the hollow pretentiousness of fashionable old physic is extremely clever, and we are sorry to say that one of the best scenes in the book, "the Consultation," is not an overdrawn picture, nor confined to the old school altogether, and justifies the new reading given of the old proverb, "in the multitude of councillors there is safety"—yes, to the councillors, but Heaven pity the object of aggregate medical attention. A consulting congregation is about as irresponsible as a corporation; both are equally destitute of the fundamental elements upon which punishment naturally falls.

But literature is rich in good satires of our profession, and what we long to see is something more really true to nature. The power displayed by the writer of "Fair Oaks," and the evident selection of this field for his specialty, make us hope that we shall have other works from the same pen, which shall give

a fuller and fairer delineation of what the true hero of medicine is or ought to be, combining as he should so much of the teacher with the doer of good, and re-establishing the primitive Christian identity of the healer of the body and the saviour of the soul.

CLINICAL RECORD.

Report of the Homœopathic Hospital in Leopoldstadt,
By Dr. Wilhelm Loew, Vienna.

The old aphorism, *natura sanat medicus curat*, has been thus paraphrased by many modern physicians: "That most acute disorders may be cured by a rational regimen and corresponding diet, without the assistance of medicine." Without entering into a controversy on this subject, we will simply adduce a fact which will tend to lessen the stability of this axiom, and believe that we may venture to maintain, with certainty, that the following case cannot stand alone. Experience must have frequently taught the practical physician that the nature of organic beings once put out of its usual course, or impeded by external influences in its salutary action, in the first instance continues to deviate still further from the normal condition, terminating in dissolution of the organism, if not counteracted by an opposite action, or in the last instance, succumbs in the contest, unless assisted by the art of medicine, which in fact is but a wise use of the natural powers. If we are willing to despise the innumerable experiments which have been made, and deny any curative action in the whole range of remedies used in medicine, then a large department of nature, with all its powers, must remain an enigma not to be solved. We must still further assume that all herbs, resins, and other substances, which have an undeniable prejudicial action on the human organism, have been only supplied by nature for a noxious employment, and not at all for a curative one. We [illegible] with these few remarks, and begin our [illegible] which is well fitted to weaken a statement so [illegible] times.

Fæcal Vomiting.

Barbara Entenfelder, 48 years old, stout, well-made, who had always enjoyed good health, menses normal, felt unwell a few days before her admission into Wurmb's Hospital; she complained of loss of appetite, disturbed sleep, and of frequent racking, sometimes constrictive, sometimes digging pain in the region of the stomach. As she had been several days without an evacuation of the bowels, and attributed her sufferings to this circumstance, she took an aperient. Her sufferings not only continued the same, but her condition became so much worse, that she was compelled to quit her employment and place herself under our care.

Besides the above-mentioned particulars, we were unable to find on examination any other more remarkable symptom than a slight depression of countenance, partially coated tongue, and slight tenderness in the iliac region where is an old umbilical hernia of which the patient was ignorant, and who of course could not give any account of the length of time it had existed. The organs of the chest, as well as the liver and spleen, were in a normal condition. As our attention was entirely directed to the subjective symptoms, and the patient described the pain as an ordinary cramp of the stomach,—as the constipation had existed for several days, the tongue was coated, and the pulse not at all quickened, we hoped that we should find Nux to be the suitable remedy, and prescribed it in the 6th dilution on the 17th December, 1855. We had no reason to change the remedy until the third day, for the symptoms occurred at longer intervals, and with less intensity. On the 20th the pains returned with greater violence, as the obstruction still continued. Nux was now given in the 3rd trituration, subsequently other remedies with emollient clysters were employed, but without any lasting benefit. After the disease had fluctuated for several days, great uneasiness suddenly appeared, with fæcal vomiting. The vomited matter consisted of liquid, healthy looking fæces, which in colour and odour could not be distinguished from ordinary stools. The vomiting was repeated three or four times before the evening visit. The constipation continued, the pain constant, but with the exception of the unhealthy countenance,

and the great exhaustion, we could not obtain any particular result from the physical examination.

The want of reaction from the remedies administered, the fæcal vomiting, and continued constipation, indicated Opium, which was given in the 3rd dilution.

The result was astonishing; the nausea subsided, the vomiting ceased, the pain became relieved, the countenance brighter, and after some hours liquid evacuations took place, affording relief. All morbid symptoms disappeared, and the patient made rapid progress towards recovery, after we had ceased to give Opium. The exhaustion which followed the efforts of nature, certainly detained the patient several days in the hospital, from which she was dismissed cured on the 1st of January.

We believe that by simply bringing forward this case, we can establish the principle, that in some cases, art often succeeds in inducing a beneficial action, when the powers of nature are unable to overcome the morbid condition of the organism, and that in most instances art and nature must go hand in hand to produce a successful result.

Chronic Vomiting.

Maria Jachralka, 46 years of age, mother of five children, menses normal, had always previously been in good health; she has now for three months suffered from disordered digestion, and vomits after each time of taking food. The so called domestic remedies, as well as medicines from many physicians, together with a lengthened stay in the General Infirmary, (where there is certainly nothing wanting in the necessary rest, care and regimen suitable to such cases) were unable to remove her disease. At first, the vomiting after eating or drinking was unattended with pain, but now for some days there has existed great tenderness of the abdomen. The appetite was undiminished, nevertheless the dread of, or the certainty of vomiting prevented her from taking food. Ice, as well as tures and powders, &c., (for she had taken quantities alf., Mag., Bism., and Acet. Morphii) were not of

any service, even sour milk, so easily digested by such patients, excited the same amount of nausea as other food.

Besides these subjective symptoms, we observed the following on her admission into our hospital the 24th of July. The patient was thin, of a cachectic habit, the countenance yellow, tongue slightly coated, clavicular region sunk, spleen and liver enlarged, pulse 80; otherwise nothing abnormal.

Hyoscyamus of the 6th dilution was prescribed. The nausea gradually disappeared, and the patient, already by the 5th of August, feels that she is on the road to perfect recovery.

Barbara Memosheim, 22 years old, a brunette, of lively temperament, pale countenance, always enjoyed good health until the month of December. She suddenly fainted after dinner, and recovered after slight vomiting. As the vomiting returned on the two succeeding days after taking any kind of food or drink, a physician was called in, who declared the complaint was nothing more than gastric disorder, which by proper diet and rest would disappear of itself. She was, in consequence, for several days restricted to weak soups, when she felt better, and was free from sickness. As soon, however, as her appetite returned, and she was allowed a more nourishing diet, the vomiting immediately returned, and continued up to her admission into our institution. She had been treated by several medical men of reputation, from whom she had a variety of prescriptions.

These medicines, and a number of other so called domestic remedies, proved of no service; the patient became thinner, looked pale, and got weaker daily, so that she was unable to do any work. In this pitiable condition she was brought to our institution on the 29th February. After a very careful examination, we arrived at the following diagnosis. Notwithstanding so long an illness, the patient was not so very thin, but pale, and without any cachectic appearance, all the functions were normal, the vomiting easy, without retching. No swelling nor induration could be ascertained by a strict examination of the abdomen, neither was there any tenderness on firm

pressure of the epigastrium. The lungs and heart were normal. It was impossible to assume that there was any material change in the stomach, we therefore inferred that it was a case of *affection of the nerves of the stomach.*

We therefore considered Hyoscyamus as the most suitable remedy, because this medicine, on the one hand, has a number of symptoms occurring *after eating*, and on the other, vomiting of food is peculiar to it. The most astonishing effects fully justified its employment. The patient, who was admitted on the evening visit, was immediately ordered Hyoscyamus in the 6th dilution, was free from vomiting the next day, being then on spare diet, and likewise the following days, when she had more nourishment and more substantial food; she has already been in our institution 24 days, and is making visible progress to perfect recovery, without the least relapse during the whole time. Her constitution, which had been much enfeebled by the 14 weeks illness, required some care in order to strengthen it, of which she would have been deprived had she been dismissed at an earlier period.

Strangulated Hernia, by Mr. T. Wilson, Hull.

February 12th, 1856. At the request of Dr. Atkin, I saw with him in consultation Mrs. W—, æt. 60, a widow woman, much reduced by previous illness, emaciated and sickly looking; she was, in addition to her bodily ailments, in a state of great mental suffering from the death of her husband, which had occurred a short time previously. Dr. Atkin had been in attendance since the 9th instant, he informed me that "on the 7th she was seized with pain in the bowels, most severe at the umbilicus and hypogastrium; pain constant; worse after tea; crampy pain on movement; fits of nausea; shooting, stinging pain in the forehead. *Bowels moved on the 9th*; passed a large quantity of pale urine. Surface of abdomen hot; no tenderness on pressure; pulse 84; skin warm and moist. Nux vomica was given every four hours. 10th. No motion of the bowels: vomited bitter matters twice on the previous night; pulse 84; to take Mercurius 3 every four hours. 11th. Slept till one

a.m.; twitching pain across stomach and bowels, increased by coughing or movement; bowels feel drawn together: pain increased after food; relieved by movement of flatulence. Abdomen tender to pressure; tympanitic; no hernial swelling; pulse 96. Belladonna every four hours.

Evening. No inclination for motion; pain constant, with paroxysmal aggravations, ceasing by shifting of flatulence: to take Opium and Veratrum. 12th. Vomited several times in the night; no motion; pain as yesterday. No sickness to-day. Discovered a small hernia in left femoral region. To continue Opium and Veratrum.

About four p.m. I attended with Dr. Atkin; conjointly we attempted to return the strangulated contents of the tumour by the taxis without avail; we next gave a drachm of laudanum, and again attempted the reduction, without producing the slightest result. It was now determined that the operation for strangulated femoral hernia should be performed.

I applied to Dr. Macmillan and his son, Dr. A. Macmillan, surgeons, to assist in the proposed surgical measures. On being informed that the case was Dr. Atkin's, they refused to help me with the operation, unless I would state to the doctor that the patient must be placed entirely in my hands for the time their assistance would be required, that is, they wished it to be understood that they would not meet Dr. Atkin on account of his homœopathic heresy, but that as far as I was concerned, they would assist me in a purely surgical case, although aware of my medical tenets being homœopathic,—perhaps they viewed me as the least homœopathic sinner of the two, as my conversion had been of a more recent date than that of the doctor.

Some time was lost by all this circumlocution, of course Dr. Atkin transferred the patient entirely over to me, then the Doctors Macmillan accompanied me to the patient. We saw her about half-past seven p.m., she appeared much under the influence of the laudanum given in the afternoon; her friends stated that she had vomited a few times since the last visit, and that the ejected substances had a very bad smell.

Doctors Macmillan examined the case, they both pronounced that the symptoms were not sufficiently urgent for an operation, and, in their opinion, all had not been done that might have been tried

under the circumstances. I asked what they would advise? The senior M.D. sagely proposed Calomel and Jalap, assisted by Croton oil, to be followed up by enemas; of course (being in a minority, and they having refused to assist in surgical means) I allowed them to send for the drugs, &c., they wished to administer. The young doctor-surgeon now left, being perfectly satisfied that the physic and injections would do the thing. He had not been gone many minutes, when our patient vomited, much to the astonishment of the remaining allopathic doctor; the substances ejected from the stomach were strongly stercoraceous. His eyes being opened as to the true nature of the case, he was now as anxious for an operation as he had previously been opposed to one; the junior M.D. having departed, we had to seek further surgical aid,—fortunately we soon obtained the assistance of Mr. Gibson, surgeon, who pronounced, as his opinion that the hernia might be reduced without operation: he proposed the cold water douche, to be continued for a long time, and then to employ the taxis; these proceedings were gone through under his management without benefit, but I am afraid, injury to the patient, from the manipulations and delay.

All the parties having agreed that other measures were useless, I commenced the operation about nine p.m., Mr. Gibson administered Chloroform, and Dr. Macmillan assisted me. The skin over the hernial tumour was raised from the underneath textures by Dr. Macmillan and myself, each taking hold of a fold, the scalpel was inserted below the raised skin, and pushed through, cutting its way out upwards; the parts were then let loose, the incision through the skin was nearly three inches in length; with assistance of a director and forceps, scarcely using the scalpel at all, the sac was opened, showing its contents to be a knuckle of the intestines and a small portion of the omentum, both were of a deep chocolate colour; the stricture was liberated by division of Gimbernat's ligament with the usual blunt pointed bistoury; although the strictured parts looked to be in a state approaching gangrene, it was still deemed the safest practice to return them into the abdomen, which was accordingly done without difficulty; the edges of the wound were next brought together by suture, and a compress of dry lint applied, retained by a calico bandage put on in the figure of 8 form, round the abdomen, loins and left thigh. The patient bore the operation remarkably well.

February 13th. Dr. Atkin saw the case with me this morning,

as we considered the allopathic compact ended as soon as the operation was over, and our former conjoint attendance on the patient was resumed.

Our patient had passed a tolerably comfortable night, but could take no food, solid or liquid, without feeling sick; she vomited once in the night, and at seven this morning. Pulse 96; very little pain. To take beef-tea, and a few doses of Nux vomica.

14th. Low spirited; pulse 80, rather full; slight tenderness in the abdomen, near the wound; no vomiting or feeling of sickness. Takes very little nourishment; tongue moist and furred. The wound looks healthy; dry lint and plaster, with a compress of calico bandage have been the only dressings used. The patient has twice felt a desire to have the bowels moved, but they have not acted yet.

16th. Still no passage through the bowels, to-day being the seventh day since they were opened. Low spirited; pulse 84; tongue cleaner. To take a table-spoonful of castor oil every four hours, until the bowels are moved.

17th. Bowels acted freely last night after the first dose of the castor oil; tongue clean; no pain in the abdomen; pulse 84; wound healing rapidly.

19th. Shiverings down the back. To take gt. Puls. 6.

26th. Progressing favourably since last date, until yesterday, when she had nipping pain in the central part of the abdomen; to-day only feels a little of it. Pulse 76, full. Had stinging pains in the wound last night; tenderness, on pressure, in the left iliac region. On removing the dressings from the wound, there was a profuse discharge of fetid sanious pus. To apply white bread poultices over the wound, and take every four hours Chin. Sulph. 3rd trit.

27th. Free discharge of more healthy pus from the wound without fetor. To take porter, and continue the medicine.

March 1st. The wound discharges thick red looking matter, but without smell. To take three times a day Chin. Sulph., 2nd trit. Towards evening, moved three times in the bowels, with severe colic.

3rd. Bowels confined yesterday, opened twice to-day, which being an unusual thing with her, she was somewhat alarmed. Discharge looks thick and a dark red colour; pulse 64; tongue clean. To take three times a day gl. Phos. 30.

March 5th. Pulse full 90; light colored diarrhœa after food or drink; bowels moved about eight times in the twenty-four hours; shooting pains in the hypogastrium and lower part of the spine; influenza. The wound discharges yellowish matter. To take every four hours gl. Arsen. 6.

6th. Diarrhœa continues; low spirited. To take every four hours gl. Arsen. 3. To apply to the wound a poultice made of crushed linseed, with the oil in it.

8th. Costive; pulse 64; tongue clean. The wound has discharged more freely from another opening formed below the old one, pus more healthy. To continue the linseed poultice, and omit the medicine.

10th. Wound granulating. Aching at the back of the head; left eye painful, with lachrymation; pain in the abdomen near the wound. To take gl. Rhus rad. 3.

20th. Has progressed favourably since the last date, the wound has been healed some days, but the parts near it are still tender. Rheumatic pains. Gl. Silic. 30.

31st. Redness and swelling have commenced near the pubes, on the left side next to the wound, as if suppuration was commencing. To take gl. Silic. 18.

April 3rd. A sinus has formed near the wound, opening at the lower part; a director can be passed under the integument about an inch, this I divided with the bistoury. To apply white bread poultices, and continue medicine.

5th. Wound nearly healed; costive; painful evacuations from the bowels; stinging, aching, and prickling down the left thigh; right eye rather inflamed. To take Nux vomica.

12th. Wound healed; constipated.

14th. Applied a truss. Quite well.

April 20th, 1857. I saw our patient a few days since, she enjoys her usual health, and feels no ill effects from the operation.

Cerebral Disease, by Dr. Atkin.

Mrs. H—, æt. 51.—20th February, 1856.—Last April had an attack of diarrhœa which lasted some time. In September dysentery; passing slime and clotted blood, with great sickness; unable to retain food. These symptoms continued till December. Legs have been œdematous.

Has for some time been taking opiates night and morning.

At present no sickness; bowels moved once a day; urine high coloured, thick, and scalding; not coagulable.

Complains of her legs feeling tired, and of insects creeping over them, and burning heat—says the bed is on fire; fancies the room is full of smoke, and that there are cats in the bed; also that a baby she had, which died several years ago, is in bed with her, and exclaims frequently that she is lying on him and will smother him; constantly talking to the children, or muttering; is sitting propped up in bed, moving her hands as if sewing; when spoken to, smiles and answers incoherently; picks at her mouth; thirst; no appetite; pulse 86, very small; knees bend under; cannot support herself; both ankles are rigidly extended, and the toes flexed under the feet; the metatarsus is bent on the tarsus so as to give a club-footed appearance.

The toes are so rigid they cannot be extended, and the ankles cannot be flexed, even by considerable force; no sleep without an opiate.

Her allopathic attendants say that there is no chance of her recovery,—or if she does recover her intellect will be defective. Diagnosis: softening of the brain, or else very great anæmia, simulating softening. Prognosis guarded, if the latter supposition right, recovery possible.

Stramonium every 6 hours.

21st. Very restless night; fancied children beside her, and talked to them, pulling up the bed clothes and gathering them to her: fancied the house on fire and that the children would be burnt; very much excited; retched a little white froth this morning; two motions, natural; less thirst; taken food with relish; tongue brown, moist: face pallid; pulse 96.

Ars. 3, 6 hours.

22nd. Pulse 96; four motions passed in bed; less wandering.

Continued.

23rd. Two motions; more sensible; replies more sensibly; no sleep; feels afraid of fire, and of falling; pulse 108.

Continued.

24th. Complains of being cold; slept quietly half-an-hour, then woke with a start; hands trembling; two watery motions; pulse 100.

Sac.

25th. Four motions passed in bed; nose bled; hands contracted, stiff; less wandering; when spoke to, gives a sensible reply, but talks a great deal to the imaginary children.

Tr. Nucis 3, quarter drop 4 hours.

26th. Dozed a good deal in the night; woke with start, thinking she was falling; more appetite; hands not so contracted; legs and feet as before; by using considerable force can move the right ankle a little.

Sac.

27th. Slumbered a good deal; faint on waking; much more rational; a formed motion to-day, and asked for bed pan.

28th. Slept most of the night; to-day much less talking; three motions.

Sac.

29th. Good night; legs and feet so sensitive cannot bear bed clothes, and cries out if touched; toes not so tightly flexed.

Acon.

March 2nd. Two good nights; woke and complained much of cold; thought there was a needle in the bed, which she hunted for; headache; every thing she takes tastes very salt.

Merc. 3,—1, 2, 3, 4, 3ce.

5th. Restless night; return of fancies about cats and babies; to-day very drowsy; stupid looking; on being roused says she is poorly, and when not spoken to falls asleep.

Bell. 3.

7th. Restless nights; varying of heat and cold; urine scalds; appetite bad; tongue furred; not so drowsy.

Ars. 3—6 hours.

11th. Slept better; urine still scalding; no appetite; thirsty; no motion.

Sac.

12th. Restless night; much heat in legs; heat in mouth; pain [illegible] vertex; wanders when awake in the night, but quite sensible [illegible]ing the day.

Ars.

[illegible]eping better; on waking, sees men standing at foot [illegible]lains of weakness; occasional stabbings in the head;

Continued.

17th. Sleeps well in early part of night; restless from one to six; thirst; aching in legs from knees to ankles, they feel hot; faint feeling at times; pain in stomach; pulse 108, small; one eye blood-shot.

China $^{6}/_{3}$ 1, 2, 3, 4.

20th. Woke fretting, with perspiration on face, and very timid; thought there was some one in the bed with her; is cold; sheds tears when spoken to; semilateral headache; vomited after food.

Puls. $^{3}/_{3}$ 1, 2, 3. 4.

24th. More cheerful; has slept tolerably; burning when urinating so severe as to cause perspiration; complains of points of fingers being sore, and of hairs in her mouth; pulse 108; stabbing pain occasionally in the head.

Cantharid. $^{6}/_{3}$ 1, 2, 3.

26th. Much less pain when passing urine; appetite rather better; the feeling of hairs in the mouth very distressing.

Silic. 30—1, 2, 3, 4.

30th. Less feeling of hair; feels cold; burning in hands and feet; no motion of bowels since 26th; pain in forehead; has had a return of the painful sensitiveness in the legs, which was removed by a dose of Aconite. She has now lost all contraction of fingers, and can use her hands perfectly; the ankles and toes still contracted, but the toes of the right foot can be extended by the hand, though on letting them go they are drawn under the foot: she can also voluntarily move the right great toe a little.

Plumb. met. $^{13}/_{6}$ IV, 3l.

April 10th. Has been gradually improving; has taken no medicine since the 3rd, except one dose of Calcarea, after a night of horrid dreams and much fear on waking; appetite bad; pulse 108; feet feel sore; severe frontal headache; tongue dry, yellowish and furred.

Tr. Rhus 3—a drop 3 times a day for 2 days.

18th. Better nights; appetite improved; thirst at night; much tingling in hands, as if asleep; pains in legs and feet.

Laches. 4—3.

22nd. Drowsy and stupid; face swollen.

30th. Sleeping better at night; has a little natural sleep in forenoon; pain on urinating.

Plumb. metall. $^{12}/_{6}$ 3 a.

May 5th. Sleeping better; still fears falling, and is apprehensive about trifles; headache; throbbing in temples; pain in nape of neck, which is sore to the touch; on passing urine, feels as if the stream was going into the bladder not passing out.

Glonoine night and morning.

8th. No change in headache.

Sac.

11th. Head rather better; nervous; full of fears; appetite bad.

Ars. $^{12}/_{6}$—6 hours, for 4 days.

24th. Has been gradually improving; has sat up in an easy chair, almost daily, for some hours, and been carried down to the drawing room; her knees still bend under her when raised to standing position; the right ankle is much better, and she can keep the right foot flat on the floor when it is placed so; when sitting and her right leg stretched out, she can draw it up; the left ankle is still contracted, and the foot, when on the ground, rests on the end of the metacarpal bone of the little toe.

The legs to be rubbed three times a day with olive oil.

26th. Good nights; has for some time lost all fancies of cats and babies, and sees no men; she is tearful, and very apprehensive if any of her family are from home, fears they will not return, or that they will meet with some accident.

Sac.

28th. Has been out in a garden chair for the last two days, and to-day had a drive in a carriage, and spent the middle of the day with an old friend; feels chilly in back, and one or two slight shivering fits.

Nux 3 A.

May 7th. Vomited on the night of last report; chilliness gone; in every respect improved.

Rhus $^{30}/_{3}$—3 dry.

19th. Gradually improving; out in garden chair every day the weather will permit; pain in nape of neck and occiput, both sore on pressure; some stiffness of shoulders.

Zinc. metall. 1, 2, 3, 4, 5, 6,—3 a.

Has improved; has had, occasionally, sick headache, gnatis, and Pulsatilla as required. She can now

move both knees, can stretch out the right leg a little, and draw in the left one when stretched; the left ankle is slowly improving, and the left foot can be placed flat on the ground; can also move the left toes a little, though they are still drawn under the foot when at rest.

Cupr. Acet. every third day.

September 10th. Still improving; can now stand with a little assistance; sleeps well, and has no fancies or fears; appetite still very poor.

Omit. Medicament.

23rd. Continuing to improve.

October 21st. Has gone to Jersey for the Winter, and borne the journey well; has been well with the exception of a slight feverish attack, which yielded to Aconite and Mercurius.

May 1st, 1857. Has continued to improve through the Winter. I understand she can now walk alone with slight assistance from a stick.

Was this softening of the brain? I am aware that often in cases of softening there are periods of remission of symptoms and apparent recovery,—but do such remission extend over so long a period as this has done. Time will show. At present I am inclined to think that the symptoms were from an anæmic condition of the organ, and not from change of structure.

Case of Arthritis.—Metastasis to Pleura and Pericardium.—Cure.

By Dr. Adrian Stokes.

On the 9th of Dec., 1856, I was called to see a young man of 22 years of age, who had been suffering severe pain in his feet for twenty-four hours. I found the case to be one of arthritis: there was great tenderness of the instep and internal malleolus of right foot, and of the metatarso-phalangeal articulation of the left great toe. An inflammatory blush extended over the outside of the foot and under the ankle of each foot; the pains are very intense and kept the patient in a state of perpetual excitement. The pulse was quick, hard, and full. There was some cough, of a harsh, ringing character, attended with spitting of a frothy mucus occasionally; he had scarcely slept at all during the night before the day of my first visit; I immediately ordered a lotion of Tinct. arnica ʒj in a pint of water,

with ℥j of spirit; the feet to be kept enveloped in linen rags, wet with the lotion, under oiled silk.

To take Aconite 2, and Arnica 1, alternately every two hours. This treatment was followed for three days without any sensible amelioration; and as the cough became rather troublesome at night, the medicines were changed, and he had Aconite and Mercurius. At the end of a week the patient had somewhat less of pain in the feet, although still at night it was very severe, and the inflammation was diffused over the fascia of the feet, not much disposed to localize itself in the joints of the great toes. Finding the ordinary doses of Aconite made no impression, I determined on using such doses as should exercise some control over the disease, and accordingly ordered the mother tincture of Aconite alone internally, 2 drops every three hours, continuing the application of an evaporating lotion to the feet. By the end of ten days the feet had become far less painful, and he could bear passive motion of the toes and ankles. but the shoulder joints had now become the seat of pain, and as the cough had continued during all this time, I began to entertain serious apprehensions of a metastasis to the pleura. I continued the Aconite in 2-drop doses, and gave Pulsatilla in alternation. But the disease went on, and acute pains in the left side of the chest made it evident that the pleura was now the seat of the inflammation. A feeling of suffocation had become very distressing, and a pain across the sternum as of a bar constricting the chest pointed to the pericardium as equally involved in the mischief. Percussion of the chest soon revealed the presence of effusion in the cavity of the pericardium, and also in the left pleura. The case had now become so serious that I informed the patient's friends of the gravity of its nature, and suggested the propriety of a consultation. Dr. Drysdale saw the patient with me on the 18th of Dec., and continued to visit him with me for a fortnight. We agreed to treat the pleurisy and pericarditis with Bryonia and Spigelia, each of the first decimal dilution, 1 drop of each alternately every three hours. This was continued during a week with the occasional interpolation of some Ipecac. to facilitate the expectoration of mucus. When the pericardial and pleuritic affections were fairly set a going, the vertebral column was for several days the seat of most severe pain, so that the unfortunate sufferer could not bear to be moved. Ever since the commencement of the attack the bowels had been very confined, and it became necessary on two occasions to relieve them by a little castor oil, which

brought away quantities of hard, dark, lumpy fæces to his great relief. The urine was scanty, very dark, like strong tea, having a powerful odour, and amounting only to about a pint in twenty-four hours; once only was there a deposit observed, and that after fourteen days' illness, but it led to no crisis.

On the 27th of December, the pericardium was filled with effused serum, and the left lung compressed by a similar effusion up to the level of the fourth rib; the patient had had very little sleep, and that only by day. The inflammatory state was now subsiding, but the left lung gave to the ear a crepitus which indicated inflammatory action in its upper portion. We now gave Sulphur 1st trit., and tinct. Phos. 3 alternately every four hours, with the happy result of a gradual but steady improvement in all the symptoms of the chest and heart. The cough began to subside, and the absorption of the effused fluid proceeded unchecked by any relapse.

On the 12th of January, 1857, arthritic pains returned in great severity to both knees, and the Phos. was changed for Bryonia, and the Sulphur continued. The shoulders, elbows, and wrists had been constantly affected during the progress of the case more or less severely, but the joints were not specially treated, except by the application of wet compresses covered by oiled silk. The last attack in the kness, however, was of sufficient severity to demand a remedy. After a week the knees began to get better, and he had no check to his convalescence except a slight return of arthritis in the feet in the first week of February. At the end of seven weeks from the beginning of the pericarditis and pleuritis complete absorption of the fluid had taken place, the patient breathed quite freely and easily, and the pulse soon fell to its normal standard. No critical deposit was seen in the urine, which continued dark and scanty, and only improved as the patient advanced in convalescence. Three months from the beginning of the attack the young man was walking out quite recovered: heart and lungs being both perfectly restored to their former healthy condition. I could not ascertain what was the exciting cause of this attack. The patient had been living steadily for some time before it came on, and had not been exposed to cold more than usual. It was not until some months afterwards that I learnt he had suffered reverses in business, and had been much harassed and annoyed, this may perhaps account for it.

I could not trace much good to the action of Aconite in this case, in any of its phases; it certainly did some good in the first onset,

when given in quantities of 2 drops frequently repeated, but not to the extent I had expected. When the heart and pleura became affected, however, the action of the Bryony and Spigelia was most evident in controlling the symptoms and guiding the case towards a cure. This was quite apparent after two days use. And when the acute inflammation had subsided, Sulphur did its work admirably in assisting the absorptive process.

If another instance were needed to show the power of fractional doses administered on the principle of homœopathy, this most severe case of arthritis would satisfy any candid observer. That a disease involving life in very serious peril should be capable of treatment and cure by means so gentle as our treatment is indeed matter of gratulation to the patient and his physician alike. Every such case occurring in our practice gives strength to our hands and confidence to our hearts, and triumphantly vindicates the truth of the principle on which our practice is based.

Cases treated with the Chromates of Potash, by Dr. Drysdale.

1. *Rheumatic Sclero-iritis in a syphilitic constitution.*

Mr. W., æt. 29. Has been subject to inflammation of the eye from childhood. Has had syphilis three times; the last time four years before, and was treated with Mercury, and salivated. He had gonorrhœa a year before.

In the middle of July he was attacked with inflammation of the right eye, and it continued to increase, but he had not put himself under any treatment for fear of the bleeding and salivation he had undergone on former occasions. On the 29th of August, he came to me suffering from great pain in the head, and over the right eye, with excessive flow of tears, and intolerance of light, so that it was difficult to obtain a good view of the state of the eye. The sclerotic was deeply injected, and iris muddy; the conjunctiva injected, and a large white opaque spongy looking speck in the middle of the cornea, to which red vessels ran across the clear part. Up to the 13th September, he got Sulphur, Belladonna, and then Spigelia, with some relief to the pains in the head, but the symptoms of the eye remained the same. He now got gr. j of the first decimal trituration of the Kali bichrom., to be dissolved in fourteen spoonfuls of

water, and one taken every six hours. Under this he improved rapidly, and to such a degree that on the 27th the eye was nearly free from signs of inflammation, and the speck and vessels supplying it were less. He got no medicine till the 2d October, and then the speck remained the same, with watering of the eye on attempting to use it; he got Hepar, followed in due course by Merc., Euphras., and Thuja, with progressive improvement of the speck.

2. *Enlarged tonsils, with deafness.*

A stout, red-faced man, above 50, had for many months swelled tonsils, and the neck thick outwardly below the angle of the jaw. The Eustachian tubes seem to be blocked up, and he is very deaf, so that he could not hear a watch, except when very close to the ear. He had frequently been treated with caustics and counter-irritants without any beneficial result. He got one grain of the 1st decimal trituration of the neutral chromate every night, and in a fortnight he was so much improved, that he could hear ordinary conversation. The medicine was continued, and in three weeks more he considered himself well enough to require no further treatment, and the diminution of the swelling is visible in the shape of the neck.

I have frequently used the same medicine in the swelled tonsils and deafness of children; in many cases with excellent results. I use the neutral chromate in the 1st centesimal trituration in those indolent enlargements where there is little perceptible inflammation, and the patients are of flabby, lucophlegmatic habit of body with foul tongue, and thickening also of the nasal mucous membrane, and disposition to scabby nostrils.

In cases of subacute inflammation, with not much fever, but tendency to formation of small ulcers on the tonsils and velum, I give the bichromate in the 2nd or 3rd dilution.

3. *Chronic inflammation of the Schneiderian membrane.*

Mrs. H., ætat. 50. Had been always subject to colds in the head, and determination of blood to the head. About two years before she had a severe influenza, and from that time she dates her present symptoms. The catamenia ceased about two years ago also.

21st March, 1853. Complains of constant discharge of thick yellow matter from the left nostril, mostly early in the morning, and

having a fœtid smell after any fresh cold. She has also a severe pain up the muscles of the left side of the neck to one small spot in the side of the head, brought on and aggravated by blowing the nose. In the left nostril, half way up, there is a severe smarting pain extending to the malar bone below the eye. There is little sneezing, and no perversion of the sense of smell. The general health is good, except that the bowels are costive, and tongue white.

Prescription. Kali bich. 6, 3, 6, 2, 6, 6, a powder of each dilution in succession, one powder every second day, dissolved in four spoonsful of water, and one to be taken night and morning. There was also given a lotion composed of ½ a grain of the neutral chromate to the ounce of water, to be snuffed up the nostril once a-day. On the 5th April, she was much better than for two years. The pain was quite gone for some days, though she had a slight fresh cold: the discharge is much less copious, and is thin, and without fœtid smell. The pain in the neck and head, and malar bone gone. The medicine was repeated, and at the expiration of the second course she was well.

4. *Gastric Affection.*

The following case of cure seems to correspond remarkably with a peculiar symptom in the pathogenesis of this medicine, *viz.* symptom 97 in the *Hahnemann Materia Medica.*

Mrs. S., a middle-aged woman, has had for four years the following:—

After food she has a choking, as if there was something hard all down the œsophagus, then a hiccup, and a jumping and shaking as if the stomach jerked up, not painful; then a curious feeling as of something eating in the bowels—then gulping up of food unchanged and not sour, with pain across the middle of the back. Otherwise well enough, except the bowels always costive.

Prescription. K. bich. 6, 2, 6, 2, 6, 2, one powder every second night. 24th Oct. Has had more relief from this than any other medicine, and only once or twice the curious jump up and hiccup. Repet. Med. After this she was quite relieved.

5. *Herpes exedens or Lupus.*

A. K., æt. 64. A man in other respects healthy, and who had had syphilis 40 years before, but no symptoms of it in the inter-

mediate time. For the last 10 years has had a sore on the left cheek about the size of a large almond; the base of it is clean and raw, and it discharges much clear watery fluid, very hot and scalding. There is no pain. With the exception of a disposition to suffer from cramp he is otherwise quite well.

Prescription. On the 1st August, 1853, one pilule of Kal. bich. 3 every night, and the lotion ($\frac{1}{4}$ gr. to oz.) to be applied to the sore for an hour night and morning.

Two or three days after beginning the above the sore became very painful and swelled all round, involving the eyelids so that the eye was closed. The wash was only used as above for four days, and its application caused pain which lasted about an hour each time. The medicine was continued inwardly till the 25th. The swelling of the eye continued till the 17th. On the 25th the sore still continued very sensitive, and he had shooting pains in the left ear on blowing the nose. The medicine was omitted and he got Sacch. lactis till the 8th of September, on which day the face is reported to show signs of healing. Kal. bich. 6 was then given, one dose every second day. On the 21st the ulcer was nearly healed, and when the patient was next seen on the 12th of October, it was found perfectly well and healed with a depressed cicatrix which was firm and painless.

6. *Chronic Eczema of the Scalp and Face.*

A maid servant, æt. 36, otherwise in good health, had for three years eczema of the scalp, which all over and down to the eyebrows was red, raw, and oozing a thin moisture which dries into yellow scabs here and there. The hair was thin and scattered, and nearly all fallen off. Much creeping, itching and smarting of the affected parts. She was treated for some months with benefit by Rhus, Graph., Merc., &c., but it never quite healed, and on the 11th October, 1852, had broken out again as bad as ever. She then got Kali bich. second dil. night and morning, and a lotion of the neutral chromate of Potash (one grain to the ounce of water), to be applied once a day. These were continued at intervals till 10th January, 1853, when nothing remained but slight redness of the skin, and the medicines were discontinued. In April following, however, it began to appear again, and she first got some other medicines till the 16th May, when the scalp was raw and oozing as at first. She then got 1-20th of a grain of the pure Kali chrom., one dose daily,

and the lotion as before. Under this it quickly improved again, and on the 6th of June there were little traces left. The medicine was continued a fortnight longer. When seen again on the 1st of August the head had remained quite well.

Syphilitic Periostitis.

A florid red haired woman. Her husband had syphilis before marriage, five years ago. She never had any primary sores on the genitals, though she had sore throat and ulcer on the lips. The first two of her four children were premature and still born,—the two last delicate. She is now nursing the last six months infant, and her general health is pretty good. For two months has had a red and painful doughy swelling on the right shin; it is tender to the touch and after standing, but is especially painful at night, when the gnawing and scraping pain keeps her long awake. On the other leg there is a swelling like a boil. She has also leucorrhœa and itching at the vulva—otherwise well.

Prescription. One grain of 1st trit. of Kali chrom. three times a day. In eight days the node was found very much better, being colourless, small and without pain. She stated that the pain and inflammation began to subside next day, and gradually went off so that she had been able to sleep well and had no pain the last five nights. The itching of the vulva was also nearly gone. The medicines were continued in the same way, and in seven days more the node was reduced to a slight thickening, quite painless. The boil on the other leg had, however, increased, and seemed inclined to suppurate. The Kali chrom. was given up and other remedies given.

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8. *Eruption and Periostitis, probably Syphilitic.*

Mrs. W., a delicate person who had been married five years but was never pregnant. On the 6th March, 1853, stated that about Christmas last she was attacked with pains in the scalp and eruptions on it; then maculæ over the trunk; then sore throat; then pains in the shin. Also "eruptions" at the vulva, which, however, she is positive came after those on the head and body.

The head and scalp are now covered with dry, red, scaly patches at the roots of the hair and bringing out the hair; they itch very

1. The treatment by Belladonna and Muriatic Acid was commenced by a few doses of Ipecacuanha, indicated by the *vomitings* and *diarrhœa of yellowish stools*, which speedily yielded to this remedy. The loose yellow stools; the tongue dry and red, and striped with white; febrile action with agitation and throwing off the clothes; intermitting pulse and redness of one cheek indicated *Muriatic Acid;* and these symptoms were often observed to improve under its use. *Belladonna* perfectly corresponds to the ordinary cerebral symptoms of the fever. The Ipecacuanha was given in the 6th dilution, the Belladonna in the 6th and 12th, and the Muriatic Acid in the 3rd.

2. In some cases where the above treatment did not seem of much service, a good effect was produced by substituting *Phosphoric* for Muriatic Acid. The chief indication for this remedy was the presence of great prostration, stupor, diarrhœa, involuntary starts, and paralysis of the bladder. Though Belladonna was given in alternation, the amendment produced was evidently due chiefly to the *Phosphoric Acid.*

3. The indication for the use of Bryonia was the predominance of the pulmonary affection. In every case the following symptoms were present—obstinate cough, viscid sputa sometimes mixed with blood, sibilant or subcrepitant rattles on both sides of the chest, sometimes stitch in the side, the tongue usually white. There was sometimes constipation, sometimes diarrhœa.

Gastric Fever.

A boy of 16, of sanguine temperament, and robust make, had never previously been ill except with the itch. On the 20th of March, without apparent cause, he was seized with rigor that lasted two hours, followed by heat, headache, thirst, anorexia, prostration of [illegible]ngth and sleeplessness owing to inward heat. These symptoms [illegible] every day. On the 26th, his symptoms were as follows: [illegible] vertigo and heat in the head; roaring in both ears; red [illegible] slimy tongue, dry from the point to about the middle; [illegible] taste; great thirst; frequent empty eructation; no [illegible] food; sometimes nausea and inclination to [illegible] The gastric region somewhat painful to [illegible] of yellowish-green, watery fæces, five [illegible] and the colour of beer; the organs

of respiration and heart normal, skin dry, hot, pulse quick (85 per minute) not hard. Nights very restless, and generally sleepless on account of heat, thirst, very vivid and persistent dreams. Last night he got out of bed and walked about the room as though he had been awake, but he was quite unconscious; great weakness. He got Bryonia 3, a drop in water every three hours. On the 27th the state was the same, only the sleep was somewhat quieter, as he was not bothered with dreams. On the 28th the head was still somewhat confused, the tongue furred white, clammy taste, much thirst, no appetite, no nausea, the gastric region no longer painful on being pressed, no diarrhœa, urine the colour of sherry, skin dry, temperature moderately elevated, pulse 75 per minute, moderately strong. In the evening after a slight aggravation of the fever there occurred a perspiration attended with great prostration, which lasted all night; the patient fell asleep about 10 P.M., slept soundly all night, and woke up at 7 A.M. cheerful and strengthened. March 29th. Head free, tongue much cleaner, bitter taste, no more thirst, some appetite, no diarrhœa, urine increased and with a sediment like chalk, skin moist, temperature not elevated, pulse free from fever and quiet. At night tranquil sleep as in the healthy state. No more medicine was given. On the 30th his appetite returned, with the exception of slight weakness he felt quite well. On the 5th of April he returned to his usual occupations.—(*Huber, Zeitsch. d. Ver. d. hom. Aerzte Œsterreichs*, i. 55).

Complicated Arthritis.

Barbara Pina, [illegible] old, [illegible] rally enjoyed very [illegible] matic pains, arrived [illegible] very frequent change [illegible] was unaccustomed, [illegible] tism, and was admitted [illegible]

The great sensitiveness to [illegible] disposition to similar attacks, [illegible] tion by warmth, the attendant [illegible] both upper and lower extremi[illegible] straightened with great effort, [illegible] to diagnose *Articular Rheumatism* [illegible]

respond better with those symptoms than Bryonia (see *Homöop. Klin. Studien von Wurmb und Caspar*, s. 232), which was then prescribed. Soon, however, we began to entertain the same doubt as expressed in the above named work, whether Bryonia stands so high as an anti-rheumatic as it is universally assumed to be, for the patient after taking it several days remained just the same. We then substituted its modern rival Tart. emet. in the 3rd trituration, as it seemed to us to be indicated by the profuse perspiration affording no relief, and the constant pain aggravated by the least touch. In fact, it visibly confirmed its remarkable curative power, for after several days' employment it had an unusually beneficial effect upon the rheumatic affection. The swelling went down, the pains diminished, and motion was freer and easier.

Notwithstanding, the remedy was obliged to be laid aside for two days, as in spite of the strict diet the patient had a sudden attack of indigestion with vomiting. When this disappeared, she returned to the Tartar emet., which was continued until every morbid symptom had disappeared, and the patient was discharged fully recovered on the 23rd of February.

But eight days after, the 4th of March, she was again brought in in a lamentable condition, when she accounted for the relapse by informing us that she had brought it on by going out in very windy weather.

As usual, the relapse was worse than the previous attack; the pains and swelling of the joints, the immobility of the extremities and accompanying fever, were much more severe than on the former occasion.

The favorable result which we had already obtained from the use [illegible] Tartar emet. led us to order it again, and this time it did not fail [illegible] in three days the patient was considerably better.

[illegible] counterbalance this happy result, sudden metastasis to the [illegible], as indicated by violent pain in the whole of the [illegible] by short, hurried respiration, by the rubbing sound [illegible] regi[illegible]n on auscultation, the eructations, sob- [illegible] fev[illegible] Bryonia now seemed to be required; [illegible] in [illegible] on, for the fever began to subside [illegible] were moderated.

[illegible] liged us to leave off this excel- [illegible] eye, with violent pain, in- [illegible] lower lid, as well as other [illegible] revented the opening of

the eyes, and due estimation of the heart affection led us to prescribe Spigelia. The result fully answered our expectation; the inflammation was much better the next day, and in three or four more had entirely disappeared. After the removal of this affection we continued the use of Spigelia, and had the satisfaction to see the patient perfectly cured on the 6th of April.

Those acquainted with the obstinacy of such a disease, and who knows the slow course which similar cases of ophthalmia run under allopathic treatment will, on the one hand, learn from this case to value the superiority of homœopathic treatment, and on the other, to estimate the powerful and rapid healing power of Spigelia.

In the above mentioned *Klin. Studien.*, s. 238, it is remarked that Spigelia is only of service in rheumatism when symptoms of peri or endocarditis are present, and Spigelia is especially indicated in rheumatic and gouty ophthalmia, and when there are pains around, or deeply seated in the eye.

MISCELLANEOUS.

Effects of Soda.

It is well known that animals fed wholly upon sugar, are subject, among other accidents, to a softening of the cornea, and destruction of the eye. It seems that soda produces similar effects on those engaged in its manufacture: it appears to dissolve the fibrine of the blood, and cause an excessive fluidity of it, produces a kind of leucoma, and finally ulceration of the cornea.

The workmen who have to pound the crude article are the most exposed to its influence. All day long they are covered with soda suspended in the atmosphere in the form of a fine powder. It is among them that the greatest number of ceratitis with ulceration occurs. The workmen engaged in drying the refined soda by agitating it continually on heated plates of iron, and those engaged in packing it are also among those most exposed to its action.

The pernicious influence of the soda is usually manifested by the following general symptoms: earthy, wan complexion, slight puffiness of the face, swelling (generally painful) of the glands of the groin and axilla, seldom œdema of the lower extremities, anorexia, constipation, or diarrhœa, sometimes palpitation, and a well-marked

bellows sound. As regards the special local lesion, the ulcerative ceratitis, it is always large and deep, and as often precedes as follows the other symptoms.

(*From the Medical Times.*)

Dr. Simpson's great authority in reference to Homœopathy judged by Dr. Simpson's own party, weighed, and found wanting.

Dr. Edwin Lee, from his frequent visits to the continent, is well acquainted with the state of the medical profession in the chief countries of Europe; and those who desire to examine the different laws and institutions prevailing in foreign nations for the education of Physicians and Surgeons, and for the relief of the sick, will consult the present work with advantage. One chapter is devoted to the medical organization of France; one to that of Italy; another to that of Germany; and a notice is also given, although we believe not by Dr. Lee himself, of the medical organization and institutions of America. The second part of the book is entitled, "British Medical Organization;" but the portion before us is nothing more nor less than a very vehement attack upon the London Colleges of Physicians and Surgeons. The author has contrived to rake up all the abuse, deserved and undeserved, which has for the last twenty years been heaped upon these institutions, with remarks of his own of a no less damaging character. In his zeal to vilify the medical corporations of his own country, Dr. Edwin Lee has carefully excluded any reference to the reforms which have characterised medical education and examination during the period referred to; and, with something like a spirit of unfairness, he actually represents, as now existing abuses, certain defects which have long been remedied. Such being the character of the remarks of Dr. Edwin Lee upon the London Colleges, we feel bound to declare that, while much of his criticism is undoubtedly just, there is much more which is written in a spirit of obvious animosity; we cannot, therefore, allow that he has given an impartial view of British medical organization, and we must warn foreigners against the erroneous impressions which they are likely to conceive of our institutions in these pages.

On the subject of Baths, Dr. Edwin Lee is undoubtedly an authority; in the third edition of the "Baths of Germany, France, Switzerland," he has presented the public with the most recent [illegible] respecting the mineral springs of the continent, their [illegible] internal applications, and the localities in which they

Beetles in Hydrophobia.

The recent announcement of another beetle as a remedy in hydrophobia recals to our memory that the coleoptera have already furnished several specifics for this frightful malady, all of which have had their day, and after a longer or shorter period of renown have again sunk into oblivion.

In 1777, the government of Frederic the Great purchased for a considerable sum of money the secret of a nostrum which had attained a great repute as a prophylactic and cure of hydrophobia. The remedy was an electuary of the *melöe majalis*, a large beetle belonging to the family of the cantharidæ, and said to possess some of the irritant properties of the cantharis. A beetle of an allied species, the *proscarabæus vulgaris* (formerly designated *melöe proscarabæus*) shared with the *melöe* the reputation of a remedy for hydrophobia.

These two beetles were vaunted as antihydrophobics long before the revelation of the Prussian nostrum just alluded to. Thus Weickhard, in 1626, and Roesler, in 1672, wrote panegyrics on their supposed efficacy in this disease. The *proscarabæus*, especially, has at various times been held out as the true remedy and prophylactic. Among others, Meglin wrote warmly in its favour. Dr. Hauslentner, in an essay published in *Hufeland's Journal*, in 1824, recommends the *melöe majalis* and *proscarabæus* as preservatives in hydrophobia, but he states that [illegible] of success is, that the remedy shall produce a decided [illegible] urinary organs. There have not been wanting [illegible] condemnation of this remedy. [illegible] *voyage* (1780), denies its efficacy [illegible] poisons. He cites a case where [illegible]

The common [illegible] still [illegible] reputation as a remedy [illegible] tives. This insect [illegible] now regarded as a [illegible] essentially in many [illegible] Both the latter have very [illegible] while the cantharis has long [illegible] commonly called Spanish-fly, [illegible] is a native of this country, and [illegible] of June on ash-trees in the [illegible]

Baccius (*de venen. et antidot.* [illegible]

cantharis in hydrophobia, and that its mode of administration was as follows:—The head and wings being removed, they were allowed to soak for four hours in some butter-milk, then dried and baked with lentil flour into cakes weighing a scruple each, which were eaten with wine. From what Dr. Adams says (*P. Ægineta*, vol. III, p. 154), it would seem that the beetle known to the ancients as the *cantharis*, was not our Spanish-fly, but the *mylabris*, or rather *melöe cichorii*, as Dioscorides and Galen direct the species found among corn to he used medicinally, whereas the *cantharis* is generally found on trees such as the ash and elder. This species of *melöe* is that still used in Turkey and in Hindostan for forming blistering plasters.

The *cantharis vesicatoria* has been frequently recommended as a remedy and as a prophylactic for hydrophobia, and both externally and internally. Polgari (*Diss. de rabie canina*, 1768) says it is a popular remedy for the disease in Hungary,* and Moncony (*Voyages*, vol. I.) says that it is universally employed in Greece for the same purpose. Among those who have advocated the use of *cantharis* for hydrophobia may be mentioned Werlhof (*Op. Med.* vol. III.) who gave it in doses of one grain every day for six weeks as a prophylactic; Axter (*Beob. &c. von österr. Ærzt.* vol. I,) who gave a grain every three or six days, and applied the same remedy externally in the form of a blistering plaster over the wound, and this treatment he kept up for five or six weeks. Sophistofh (Marochetti, *üb. die Wasserscheu*, 1843), physician to a military hospital in the Ukraine, testifies to the value of *cantharis* in hydrophobia. He gave it in the dose of from $^1/_4$th to 5 grains. Kenspincky (*ibid.*) a military surgeon in Gamboff, treated both men and animals affected with rabies by means of *cantharis* internally, and, according to his own account, with great success.

The only detailed case we can lay hand on of hydrophobia actually treated by *cantharis* is contained in the 4th volume of *Frank's Ma-* [illegible] It is taken from the 3rd volume of the *Salzburg Med. Chir.* [illegible] The observer is Dr. Rust. It runs as follows:—A stout [illegible] was bit by a rabid dog, in the left upper arm, on the 29th [illegible] There were two wounds about 3 inches from one another, [illegible] in into the cellular substance beneath. [illegible] and the part cauterized with lunar

* the *melöe hungarus* which Schenck [illegible] remedy for hydrophobia.

caustic; and, in order to ward off the danger, Belladonna, combined with Calomel, and subsequently with Sal Volatile, was administered. On the 12th March, after she had taken in all 36 grs. of Belladonna, as many of Calomel, and 24 of Sal. vol., she suddenly became low-spirited, wept continually, complained of pains in the injured arm, principally midway between the two wounds. She was feverish, and had a horror of fluids. She would take a spoonful of water into her mouth with her eyes shut, but was unable to swallow it, and spat it out again. She now got *pulv. canthar.* gr. j, *lap. cancror.*, *sacchar.* āā. gr. vj, ft. pulv. dent. d. t. vj, one to be taken every two hours. At the same time caustic was applied to the painful part. The next day, after she had taken nine powders, she had scalding on making water, and, at the same time, the fever declined, the hardness and fulness of the pulse diminished, the fixed pain in the arm went off completely, and she was much more composed. The powders were discontinued, and with great persuasion she was induced to take a few spoonfuls of an oleaginous mixture. On the morning of the 14th the scalding was gone, and she got four more grains of *canthar.* in the above manner. In the afternoon burning thirst, she asked for beer and drank half a pint. On the 15th, three more powders. She again drank beer, and ate a roll. From the 16th to the 30th daily two powders. She was now able to take her usual food and drink. On the 30th, scalding on passing water again occurred, and was treated as before. From the 5th to the 25th April she again took two grains of *canth.* daily, and she was dismissed cured on the 28th.

The evidence in this case is not convincing as to its being a case of hydrophobia. Might not the hydrophobic symptoms have been caused by the large quantity of Belladonna taken by the patient?

The *melolontha vulgaris*, or common cockchafer, was recommended as a specific for hydrophobia by J. Hartmann Degner (*Mem. de la Nature*, No. 1742.)

According to Noack and Trinks the *coccinella septempunctata*, or seven-spotted lady-bird, has likewise been used as a remedy for this disease.

The most recent remedy for hydrophobia from among the coleopterous tribe, is the *cetonia aurata*, or rose beetle, a large shining golden green insect, a frequent visitor of our gardens from May to July. We are not aware that this beetle has hitherto been employed in medicine, or been supposed to possess any medicinal qualities. In the *Lancet* of

12th September last, it is stated that the attention of the French Academy has been directed to this insect as a specific for hydrophobia. The recommendation comes from a Russian physician, who alleges that it is very much used in Russia for the purpose of curing and preventing hydrophobia; and he asserts that it has already been successfully employed in 1791 cases. The French Academy, as might have been anticipated from its well-known zeal for science, refuses to inquire into the alleged virtues of this as of all new remedies, to the great satisfaction of the editor of the *Lancet.*

With regard to the probability of any of the above insects being useful in hydrophobia in virtue of their pathogenetic powers, we know little excepting in the case of *cantharis,* some of the symptoms of which, as recorded in the homœopathic materia medica, have a marked resemblance to some of the characteristic phenomena of the disease.

Of the pathogenetic action of the *melolontha vulgaris,* we only know that it is said to excite strangury.

Although the *coccinella septempunctata* has been admitted into our materia medica, we know very little of its physiological effects, and that little bears no resemblance to the symptoms of hydrophobia,

The *cetonia aurata* is utterly unknown to medicine, so that we cannot tell if it possesses any pathogenetic action whatever.

With respect to the action of the *meloë majalis* and *proscarabœus,* we have more information, but nothing in their recorded physiological effects corresponds to the symptoms of hydrophobia. In that inexhaustible pathogenetic cyclopædia, *Frank's Magazine,* we find many cases of poisoning by these two beetles. The symptoms produced were, however, almost solely upon the urinary organs, diuresis, strangury, hematuria, mucous urine, together with occasionally cutting pains in the abdomen, vomiting, purging, and profuse perspiration. Two deaths are recorded from the ingestion of the *proscarabœus,* but unfortunately the symptoms are not given.

It is probable that the physiological effects of these two beetles, if sufficiently proved, would show a great analogy with those of *cantharis,* to which insect they are nearly allied. In their known power to blister the skin and to excite strangury and bloody urine, they precisely resemble the *cantharis,* and possibly a further investigation would show an equal power to produce hydrophobic symptoms.

But who will prove beetles? The stomach almost heaves at the mere idea of swallowing such disgusting creatures, and we are lost

in astonishment in reading the records of beetle-cures, to find that so many poor patients had the courage to gulp down daily one, two, and even three of that very repulsive looking creature, the *meloë majalis.*

> Hungry the man who first from shelly cloister,
> Drew forth and swallowed down a living oyster,

'tis said, but what was his hunger in comparison with the desire to be well, which induced the patients to take into their stomachs the lurid monsters prescribed for them.

However, we confess we would rather prove any of the coleopterous tribe than some of those insects of a different order which have been tested by some of our colleagues abroad, such as the *cimex lectularius*, the *pediculus capitis*, the *blatta americana*, and the *aranea diadema.* The last, to be sure, was only tested in the 30th dilution, which was making things as pleasant as possible when the subject of experiment was a venomous spider.

Mercury in the Liver of Workers in Mirror Manufactories, an experimental evidence of Localization of Metallic Poisons.

By Robert Burton,

Chemical Student at the University of Erlangen.

(From the "Medical Times," July 11, 1857.)

It is a well-known fact, that in certain cases of metallic poisoning the liver is an organ whose tissue appears to exercise a peculiar attraction for many metals, whether introduced into the system by the alimentary organs, the skin, or the lungs; and the metallic presence has been detected in this organ by analysis after death.

This holds true in a remarkable manner with regard to quicksilver, which has thus been repeatedly discovered in cases of mercurial poisoning.

It is further interesting to know that those whose labours in the quicksilver mines, and some of the arts (*e. g.* silvering mirrors) expose them to the action of mercurial vapours, are the subjects of chronic poisoning by this metal; and in such cases a localization of its particles in the system, and more particularly in the liver, takes place.

An interesting case of this nature was published a few years ago, by Dr. E. von Gorup Besanez, present Professor of Chemistry in

the University of Erlangen (in "Jenaische Annalen für Physiologie und Medecin," tom. ii. p. 241).

In this case Dr. von Gorup Besanez found distinct traces of quicksilver in the liver of a woman who had for sixteen years worked in a mirror-manufactory, and was then attacked with symptoms of hydrargyrosis, of which she died in one year. Although during the whole year previous to her death this woman was entirely removed from the mercurial influence, nevertheless the metal was demonstrated with certainty in the liver after death, thus experimentally proving, that, corresponding to the remarkable avidity which the liver shows for mercury, there exists as remarkable a localization of the metal in the tissues of that organ—in other words, that the liver, with a maximum of absorbent power, seems to possess only a minimum of excernent power in regard to Mercury.

Considered in the light of its medico-legal bearing, the question, "how long after the administration of Mercury, or other metallic poison, it may be found in the liver," becomes evidently one of the highest importance, and, as such, demands publicity for every fact which can be brought to bear upon the elucidation of this subject. I therefore offer no apology for publishing the following:

Dr. Froumüller, hospital surgeon at Fürth, near Nürnberg, forwarded lately to Professor von Gorup Besanez the liver of a woman who had worked in a mirror manufactory to within a few weeks of her death, and the investigations for the discovery of Mercury in this liver, entrusted to me by the Professor, were made under his direction in the laboratory at Erlangen, the most scrupulous care in securing the perfect purity of the re-agents and cleanliness of the apparatus having been observed.

Following the method of Fresenius and Babo, the liver was cut into small pieces, and boiled in a water bath with hydrochloric acid and chlorate of potass, until all the organic matter, except certain particles of fat, was as far as possible reduced to a homogeneous fluid. Through the clear fluid obtained a stream of sulphuretted hydrogen gas was passed for some hours, and the precipitate collected on a filter was well washed, and dissolved in the smallest possible quantity of nitro-hydrochloric acid. The residue, after careful evaporation of this solution, was dissolved in water.

A simple galvanic apparatus, consisting of two plates, connected at one edge, one very thin, being of gold, the other of zinc, was immersed in this watery solution, and after a few hours the gold had

assumed a greyish-white appearance, which by friction became of a silvery white.

The gold was then separated from the zinc plate, and introduced into a glass tube, previously cleaned and dried, and sealed at one end by the blowpipe, and thus heated over a spirit-lamp, under which agency the whitish tinge disappeared from the gold, and globules of mercury, visible to the naked eye, but better observed with a lens, were condensed in the tube, thus demonstrating the existence of Mercury in the tissue of the liver under examination.

Erlangen, June 14, 1857.

[We recommend this fact to the attention of Dr. Horner's opponents.—Dds.]

Dr. Horner and his Opponents.

As might have been anticipated, Dr. Horner's open avowal of his belief in homœopathy has excited the hostility not only of the various allopathic journals, but also of several of his allopathic colleagues in Hull. Two pamphlets are before us, one written by Dr. King of Hull, the other by one who writes as he says anonymously under the *nom-de-plume* of Chirurgus, but in order that there may be no doubt as to who is the author he appends his real initials, and the address of his house in Hull.

Dr. Horner, in a second edition of his pamphlet, manfully and vigorously replies to both his opponents, and makes a cutting exposé of their mis-statements and ignorance. The attack and the defence can but redound to the advantage of homœopathy, and the confusion of its opponents in Hull.

The perusal of this controversy gives us but a poor idea of the sincerity of the professions of friendship and esteem among medical men. They seem unable to stand the test of the adoption of a novel mode of practice by their object. Thus before his conversion Dr. Horner seems to have had all that Macbeth regretted—"honour, love, obedience, troops of friends." The votes of his colleagues had carried him to the highest pinnacle of provincial medical glory. He was selected as the one most worthy to preside at the solemn conclave of the Provincial and Surgical Association, held at Brighton, on the most important occasion that could bring a huge body of doctors together. No doubt he was there spoken of and looked up to by his colleagues with profound respect. "Our learned colleague," "our esteemed president," "our worthy chairman," were doubtless the

terms in which he was mentioned, and a vote of thanks to him was probably carried by acclamation. The presence of such a respected colleague was possibly felt to increase the dignity and solemnity of the proceedings, and to go a great way towards securing the object aimed at by the monster meeting, viz.: the utter extinction and annihilation of homœopathy.

Now that Dr. Horner has seen the error of his former ways, no expressions are too harsh to be employed towards him, and the pamphlets before us teem with the most insulting and contumelious epithets that can be imagined.

As long as Dr. Horner purged, sweated, and bled his patients his practice was judicious and scientific; now that he gives globules and tinctures he "humbugs his patients." Whilst he gave calomel and black draughts he was a distinguished and honourable physician, now that he gives Aconite and Pulsatilla, he takes rank with Holloway and Morison. The cases that he may have published in his allopathic days were doubtless complimented as displaying great ability and skill, those that he details since his adoption of homœopathy are "model cases for the prince of advertising quacks." When he voted for the expulsion of Henderson from the Chair of Pathology in Edinburgh, he was "our esteemed and learned colleague," when he defends the doctrines of Hahnemann "he belongs to the ranks of charlatanry and quackery."

Verily, of all the miracles effected by homœopathy not the least seems to be the wonderful transformation it produces in the sentiments of our allopathic colleagues.

We take this opportunity of correcting an error in our last number. We there alluded to Dr. Sandwith the bigoted opponent of Dr. Horner as the hero of Kars, but we are now informed that he is quite a different person, to wit, the father of the hero. Really fathers seem to degenerate sadly now-a-days. We advise Dr. Sandwith junior to exercise his filial authority and keep the lively and irascible old gentleman in order, otherwise his own fair fame may suffer from the extravagances of his parent.

Homœopathic Institution in Algiers.

We have received a notice of the establishment of an institution in the neighbourhood of Algiers for the treatment and cure of phthisical patients. It is situated about half an hour's drive from the capital, on the side of the hill Mustapha, and surrounded by the most agreeable scenery. The principal building is a large Moorish house standing in the midst of an immense garden, which is green with foliage all the year round. Grouped around the principal building are various cottages for those families who prefer living retired. The medical director is Dr. Feuillet, and the charges seem to be moderate.

Those who desire a fine climate adapted for the winter residence of consumptive patients, could not find a more eligible spot than the neighbourhood of Algiers. It may be interesting and useful to them to know that such an institution exists there, and was to be opened for the reception of patients in September last.

Central German Homœopathic Society—Taxation of Foreign Members.

At the Congress of this Society, held at Vienna in 1856, a proposition was made and carried, that an annual subscription of one thaler should be paid by each member. At the Congress held this year at Munich, a motion was made by Dr. V. Meyer, of Leipzig, to the effect that foreign members should be exempt from the annual subscription. This proposition was, however, rejected.

As members of the Society in question we could not object to the payment of the small annual subscription, and should be happy to do so if the Secretary can inform us how it is to be done. We cannot send three shillings worth of postage stamps; a post office order is not available, and the sum is rather too small for a banker's letter of credit, or for a formal transaction with a publishing firm. And yet we are threatened with the penalty of ignominious expulsion if we do not pay. Here is a dilemma. Impossibility, or at least a difficulty next to impossibility, of paying on the one hand, and summary expulsion on the other.

Really if the Society consults its own dignity and the convenience of its foreign members, it will either let them remain in arrear (without being expelled) until they have an opportunity of attending a meeting of the Society, or what would be better still, let them (as in other societies) be honorary members as long as they are abroad, and only pay the subscription for the year they happen to attend a meeting of the Society. For the sake of the half-dozen thalers payable by foreign members, it seems hardly worth while to threaten them with such harsh measures.

Retirement of Dr. Russell.

We regret to announce the retirement of Dr. Russell from the editorship of this Journal with which he has been connected from its commencement. While we deplore the loss of his valuable co-operation in the editorial responsibilities, we are glad to say that Dr. Russell still feels a warm interest in our success, and we have the promise of frequent contributions from his pen, to which in past years our readers have been indebted for so many articles distinguished by learning, scientific research, literary grace, and critical acumen.

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Outlines of Veterinary Surgery, by James Moore, V.S. Manchester, Turner, 1857.

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Printed by W. Davy & Son, 8 Gilbert-street, Oxford-street, W.

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